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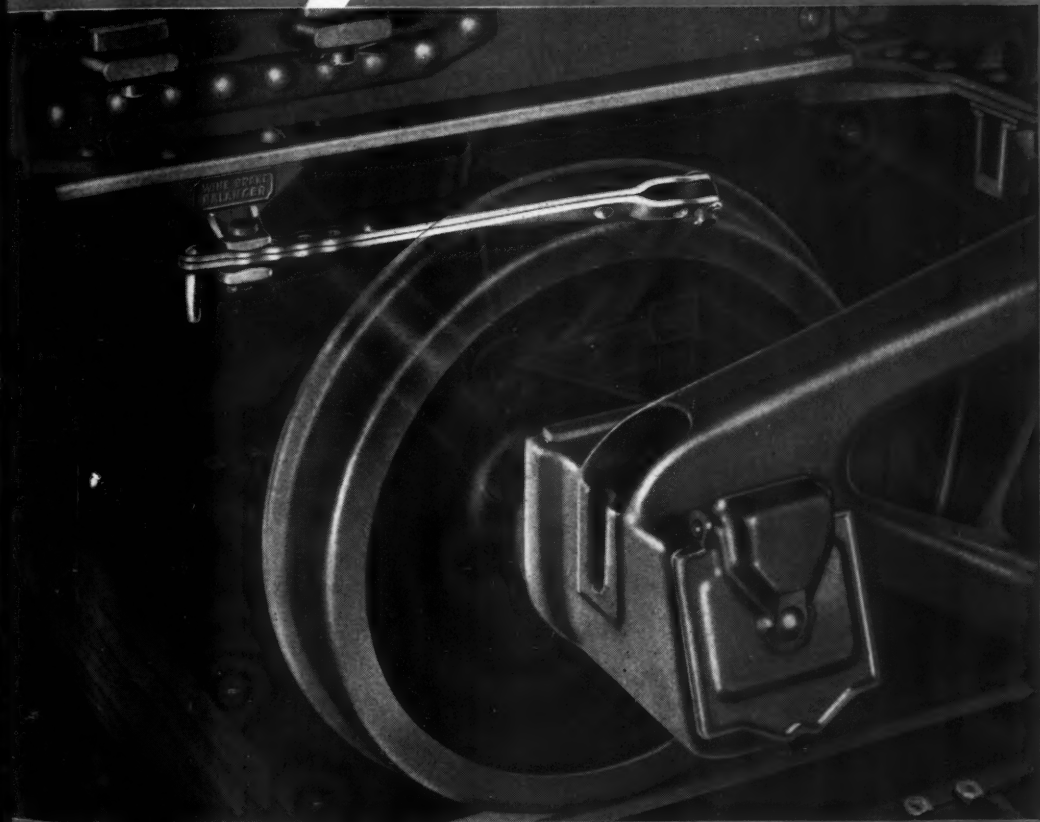
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The Week at a Glance

PUT EASTMAN ON SPAB! None of the able gents on the War Production Board (formerly known as SPAB) knows anything about transportation—yet *transportation is an ingredient of every single scarce commodity, the production of which the board is trying so desperately to increase.* To try to augment commodity production without a parallel increase in transportation capacity is like building airplanes and tanks, but forgetting to build motors for them. Given the best intentions in the world the War Production Board cannot, in the intensity of its labors, fail to overlook this vital consideration, unless it is constantly reminded. It can be so reminded only if a transportation man is named to the Board—and the logical selectee is Joseph B. Eastman.

PREDICT XING ACCIDENTS: It is possible to put a numerical rating on the hazards of a given grade crossing (according to visibility, number of tracks, etc.) and to modify that numerical rating to give weight to traffic density and the type of protection employed—and then to use this factor to determine in advance the number of accidents which will occur at a given crossing. Engineers of the Public Roads Administration worked up this formula and compared the predicted accidents with those which actually occurred at 123 crossings—with surprisingly accurate results, as revealed in an article in this issue. By comparing predictable accidents at a given crossing with the cost of eliminating the crossing, the engineers are able to pick the projects which will prevent the most accidents in ratio to expenditure.

MEET THE ODT: On another page of this issue appears an account of the organization of the Defense Transportation Office, and the names of the men whom Mr. Eastman has so far picked to assist him (plus photographs of some of them). At a press conference last week Mr. Eastman made it clear that he didn't propose to interfere in the operation of Transportation companies any more than necessary to perform his responsibilities to the public. At the same time, it is also quite clear that the task assigned to this office gets bigger and bigger the longer you look at it. The shortage in passenger transportation facilities—and the prospective shut-down in truck manufacture for civilian use—are not making the picture any sweeter or simpler.

THE T. P. & W. STRIKE: The strike on the T. P. & W. continues, at this writing, because George McNear still refuses to put the featherbed rules into effect on his railroad. Heat from various quarters has been turned on him to force him to hire 83 men to do the work of 55. They tell McNear he ought to settle on this basis as a contribution to the efficiency of the war effort. That is, it is supposed to make the war effort more efficient for 3 men to do 2 men's work than for 2 men to do it. That isn't the kind of arithmetic Hitler uses. Mr. McNear is an old-fash-

ioned character who believes that a good day's pay calls for a good day's work in return, and that a railroad is a business which ought to earn a living for the people who own it as well as for those it hires.

EXPORT TRAFFIC IN '42: The railroads in 1941 handled approximately the same volume of export business through North Atlantic ports as they did in 1918, but there wasn't any congestion. The situation is reviewed in an A. A. R. statement, reported in the news pages herein. A permit system has been instituted to control traffic to Pacific ports, under which commercial traffic is held back until ship space has been provided for it—this expedient having been adopted to prevent congestion at Pacific coastal points and to keep freight cars from standing around idle under load.

LOCOMOTIVE INSPECTION: Of the 9,570 locomotives which the agents of the Locomotive Inspection Bureau looked over in the fiscal year 1941, nine per cent were found defective and almost six per cent were ordered out of service. There were, however, fewer accidents arising from locomotive failure in the fiscal year 1941 than in the year preceding and the casualties to employees were likewise reduced—as the Bureau's report, reviewed herein, reveals.

MORE SUPERVISION NEEDED: The railroads need to intensify and enlarge their supervision—because this defense and military traffic is not going to follow ordinary traffic channels. There should be competent men on the ground all over a railroad who can take hold and start to highball whenever a sudden job drops their way. Look, for instance, at the instantaneous shift which occurred in the direction of movement on December 7, and there may be many more such surprises. Such was the counsel given by Professor Kent Healy of Yale to New England railroaders at their Boston meeting on January 13, reviewed in the news pages in this issue. Mr. Healy also believes the carriers should be intensifying their statistical studies looking toward the war's end—so they will be ready to meet the things which will then confront them.

RAP L. C. L. SERVICE: The Atlantic Shippers Board meeting last week heard a committee give railroad L. C. L. service quite a going over. The carriers, it was contended—with one or two outstanding exceptions—are not keeping the customers currently and correctly informed as to their merchandise services. They are not maintaining schedules. They are pulling off schedules without notifying patrons, and the customers are having increasing trouble with stray shipments. The Atlantic Board doesn't think very much of Commissioner Johnson's four point program which included among its suggestions a proposal that the routing privilege be denied to shippers.

TRANSPORT MATERIALS: On Wednesday of this week Mr. Eastman announced that Colonel C. D. Young of the Pennsylvania had been appointed head of the Materials and Equipment Section in the defense transportation office. It will be the job of this section to keep Mr. Eastman informed on the needs, not only of the railroads, but all agencies of transportation, for materials to keep their equipment up to the demands placed upon it by traffic. It is clear from the quality of his assistance that Mr. Eastman's information is going to be crystal clear on this question—but it remains to be seen whether the top supply board will be organized to take advantage of the valuable counsel he could give it.

TRAFFIC OUTLOOK THICKENS: The railroads are basing their estimates of 1942 equipment requirements on a 10 per cent increase over 1941 carloadings—but the priorities authorities have held back materials so that the carriers at the end of April will be 80,000 cars shy of the quantity they planned last Spring to have at that time. The leading editorial herein asks what is likely to happen to railroad traffic if a considerable share of the tonnage now being trucked should be shifted to the railroads. Attention is also drawn to the fact that if only one-tenth of present automobile travel were transferred to the railroads, it would increase their passenger volume by 100 per cent.

BIG TRUCK BILL: Advocates of bigger trucks on the highways were this week given another opportunity by the Senate sub-committee to present their arguments as to why the views they have long held on this issue now seem to be just the ticket needed to put the Indian sign on the Nips and the Nazis. These witnesses, whose testimony is reported in the news pages herein, all insist that they are staunch defenders of states' rights. Just in this one case—and solely, of course, in the interests of national defense—they believe that the principle ought to be compromised just a little. Just one little kiss, so to speak, and they promise not to tell.

STUDY BOARD PROSPECTS: The Transport Study Board expects by next September, when it will expire unless new legislation comes along to extend its life, to have completed its study of the taxes paid by the various forms of transportation; and also its examination of the question of the comparative degree of assistance which the several modes of transport are getting from the taxpayers' pockets. It expects, moreover, to have in its hands by that time the study which Professor D. Philip Locklin is making on the question of inter-territorial rates. However, it will not be possible by that date for the researchers to complete their scrutiny of the relative economy and fitness of the different transportation agencies—which was the real *raison d'être* for the Board's creation.



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RAILWAY AGE

How Much Government Interference With Transportation?

Perhaps it is because Director Eastman has chosen as some of his assistants in the Office of Defense Transportation men who worked for him when he was Federal Co-ordinator that the apprehension has arisen in some quarters that the railroads may again be importuned to adopt certain questionable reforms then proposed. But Mr. Eastman's former problems and duties as Co-ordinator, and his present problems and duties as Director of Defense Transportation, are widely different; and our information is that there is little or no reason for any such apprehension as mentioned.

People who have discussed with Mr. Eastman his conception of his new duties are of opinion that, with no unnecessary changes in present organizations and practices, he is intent solely on doing all he can to assure the best performance of which the transportation industry (as a whole) is capable, under conditions which will probably strain its capacity to the limit. That this is his present intention was clearly indicated by the statements made by him to the press on January 8 which are summarized in an article appearing elsewhere in this issue of *Railway Age*. Among other things, he said:

"I shall endeavor to make full use of the collaboration and co-operation of other departments and agencies of the government and of private transportation groups, as the executive order (i. e., the President's order establishing the Office of Defense Transportation) contemplates, and I have every confidence that I shall receive whole-hearted co-operation from all these sources. I shall try not to duplicate work which is being done effectively, nor to interfere where interference is unnecessary."

Existing Organizations Must Co-operate

It would be a mistake, however, to assume from this expression that the Office of Defense Transportation is going to be merely a staff of "contact men," regardless of what happens. Quite the contrary. Elsewhere in his statement Mr. Eastman said:

"My intent is to lay out an organization so planned and officered that it will be capable of whatever expansion proves to be necessary for the proper discharge of these duties and responsibilities."

Evidently Mr. Eastman does not intend to parallel or supersede with his subordinates either the Association of American Railroads or the managements of individual railroads (or associations or individual companies in other varieties of transportation) so long as he is able to fulfill the responsibilities of his office by working through existing establishments, rather than independently. On the other hand, railroad men know from experience with Mr. Eastman that his view of his duty to the public will be uppermost in his mind at all times; and that he will have no hesitation whatever in acting independently, and contrary to the wishes of any company or group in the transportation industry, or any other industry, when and if he becomes convinced that satisfactory functioning of the industry as a whole, in the service of the war effort, calls for such action.

Allocations Far Below Conservative Estimates of Railway Needs

Such danger as has heretofore existed that the railroads would be unable to meet without delay all demands which might come to them for freight transportation has arisen from the failure of government priorities to permit locomotive and car builders to have sufficient steel to provide equipment *conservatively* estimated by the carriers as necessary to meet their probable 1942 and 1943 traffic requirements. It was the Interstate Commerce Commission which characterized the railroad estimates as "conservative," in its annual report reviewed in our last week's issue; and the correctness of this term is attested by the fact that Ralph Budd, the recently resigned Defense Transportation Commissioner, and everyone else who has any knowledge of the facts, has not only supported the railroad

estimates, but has also constantly and repeatedly called upon the priorities authorities to put an end to their dereliction in delaying the materials urgently needed to make effective the equipment-building program adopted by the railways and equipment builders last spring.

And now we are suddenly confronted with a new condition which may cause all previous estimates of railway needs of equipment and materials to prove much more conservative than anybody has considered them. This new condition is the shortage of rubber. Whatever may be the government's present intention, suppose the shortage of rubber should become such that, as a practical matter, it would be impossible to provide tires, not only for automobiles, but even for inter-city trucks and buses? In that event, the freight now handled by such trucks, and also a large amount of travel by highway, would gradually be diverted to the railways, thus greatly increasing the demands on them.

What If Much Truck Tonnage Is Diverted to the Rails?

The Interstate Commerce Commission, in its recent annual report, estimated that in the year ended June 30, 1940, measured in ton-miles, the railways rendered 61.34 per cent of the country's freight transportation service and inter-city trucks 7.91 per cent. The Association of American Railroads is basing its estimates of railway needs in 1942 upon a prospective increase in carloadings of 10 per cent, which apparently would result in an increase in ton-miles of 14 per cent. Assuming that the same relationship between railway and inter-city truck freight traffic exists now as in 1940, it would appear that the immediate diversion of all inter-city truck traffic to the railways would boost the estimated increase in carloadings to about 21 per cent and the estimated increase in railway ton-mileage to about 29 per cent. In that case the railways would need to expand their freight-carrying equipment and other facilities more than anybody has yet estimated. In its report the Commission also estimated that, measured in passenger-miles, the railways handled about 8.71 per cent of passenger traffic and highway vehicles (including private automobiles) 90.46 per cent. These figures indicate that transfer to the railways of one-tenth of present inter-city travel by highway would be equivalent to an increase of more than 100 per cent in travel by railway.

Now, of course, there will be no early diversion of so much highway traffic to the railways. It will be a long time before the tires of trucks, buses and automobiles will wear out. The foregoing statistics are given only to indicate the extreme changes that may occur. But tires will gradually wear out; and apparently during this process the demands upon the railways for both freight and passenger transportation will be increased not only by the heretofore **expected** expansion of traffic

due to the war, but also by the heretofore entirely **unexpected** diversion of traffic from the highways to the railways. Nobody can foresee now how acute the rubber shortage will become or how long it will last; but reports regarding what is occurring at the source of the country's rubber supply in the Orient indicate that it may not only soon become very acute, but that it may last for years. The sooner such prospects are faced and measures are adopted for reasonably increasing railway capacity the better it will be for everybody.

And yet, although already there has been nine months' failure by government authorities to provide materials in accordance with the railways' original conservative estimates of their needs, no really constructive government measures have as yet been adopted for providing for those needs. The program adopted last spring provided for the construction by car-building companies of 98,000 freight cars in the eight months May-December, 1941, inclusive; but enough materials were provided to turn out only 42,218, leaving the car-builders at the end of the year 1941, because of lack of materials, 56,000 cars behind their schedule. A couple of weeks ago the priority board—then known as SPAB—directed the OPM to allocate materials sufficient to permit the construction of 45,000 cars in the first four months of the current year. But the original program called for the construction by the car-builders of 68,000 cars in these four months.

The Car Program Is 80,000 Short

To summarize, the original program called for the car-builders to build 166,000 cars in the twelve months ended April 30, 1942, but not more than 87,000 will be built, leaving a deficiency under the original program of about 80,000 cars. Also, the original program of the Association of American Railroads called for an **increase** of 120,000 in the number of freight cars between October 1, 1941, and October 1, 1942, and a further increase of 150,000 between October 1, 1942, and October 1, 1943.

By making unprecedented increases in the efficiency with which cars are used, and unprecedented reductions in the number of cars in bad order as well as in the number retired from service, the railways succeeded in reducing their estimate of the number of new cars they will require. But this was before they were confronted with the prospective diversion of highway traffic to them because of the rubber shortage. We believe they can expand and, with the co-operation of shippers, increase their efficiency enough to meet all prospective demands for freight transportation if they and equipment builders are provided enough materials for needed expansion and maintenance of equipment and other facilities; and if there is continued failure to provide the required materials, the public should place the responsibility where it will belong.

However, thus identifying the cause of such tightness in transportation as may develop will not make it any

less necessary for the railway industry, the shippers and Mr. Eastman to do the best that can be done to avoid delays, and to cope with them resolutely if they arise. If such delays occur, or even if they seriously threaten, it may be that action to overcome them will be required which will involve some limitation of the right of shippers to control the routing of their traffic; and perhaps some traffic may be shifted from one kind of transportation to another, when the shippers and carriers involved might have other preferences. We have reason for believing that Mr. Eastman would find the necessity for drastic action of this kind distasteful, and that, if he is compelled to resort to it, it will go no further than the national interest, in preventing or mitigating delays to essential transportation, may require.

The Chances for Getting Steel After April 30

There is, however, another reason why the Office of Defense Transportation must concern itself with the degree to which traffic is being divided among the several transportation agencies in a manner to accord with the economic use of available facilities—and that is the fact that the priorities authorities have allocated steel for the car-building program only up to the end of April. In the intervening time, the Director of the ODT is called upon to report to the priorities board how much equipment building will need to be done thereafter, with the understanding that the most efficient possible use of all transportation facilities has been provided for.

As far behind as the equipment-building program now is, it is of vital importance to the railroads that Mr. Eastman's position in asking the priorities board for a further allocation of materials be as strong as it can be made; and it cannot be as strong as it should be if it appears that there are important economies in the utilization of transportation plant which might be substituted for enlargements to that plant, of whatever character. Mr. Eastman must be in a position to speak with great assurance to the priorities board on this point, and individual preferences should be subordinated, if necessary, to enable him to do so. Indeed, the most vulnerable aspect of the transportation situation continues to lie, as it has in the past, in the lack of an adequate voice for transportation **within** the priorities board. Transportation is not a separate commodity, to be dealt with successfully by rationing, like copper or rubber. Instead, it is an **ingredient of all commodities**. Transportation enters into most finished products not once but many times. And if transportation has to be rationed, then many more shortages and delays than those now contemplated will occur in the production of all scarce commodities.

Mr. Eastman understands this important peculiarity of the transportation supply, as Mr. Budd did before him, and as the Interstate Commerce Commission also does, far better than any man now a member of the priorities board (formerly known as SPAB and now called

the War Production Board). For that reason, more is needed than merely for Mr. Eastman to have a strong case to present to the War Production Board when it suits its convenience to seek his advice.

Eastman Should Be Member of War Production Board

Mr. Eastman himself should be a member of this board. Transportation has come so easy for so many years that persons not close to it—regardless of their expertness in other matters—need to be constantly reminded lest they take transportation for granted, as something which nature provides like air. This is a fatal mistake which the priorities board will tend constantly to make as long as its membership fails to include someone with an intimate knowledge of transportation.

There are times when the wisest concern for self-interest consists in not insisting upon self-interest as an immediate objective, and such a time is now at hand for the transportation industry. That part of transportation which is still in the hands of private enterprise wishes to remain so—and such is also the overwhelming desire of its patrons. If it is so to remain, it will have to demonstrate its ability to function satisfactorily in a time of stress, as it does in times of peace. To function successfully under present conditions will require the subordination of particular interests to those of the industry and the country as a whole. Such subordination will entail sacrifices of individual interests—and such sacrifices will not always be uniform. They never are in time of war. Some men fight and others do not. Of those who fight, some die and others escape unscathed. But unless all men—or anyhow a preponderant majority—are willing to risk unequal sacrifices, a war cannot be waged at all. And that goes for the war against the socialization of American industry, as well as the war against the Nips and the Nazis.

If any transportation enterprise or any shipper, under the regime which the industry has now entered, fares less well than his neighbor and is disposed to complain, the rejoinder may be made that such unequal treatment, probably, still leaves the complainant in far better shape than he would be under socialization of transportation; and infinitely better off than he would be if the enemy should win the war. If curtailment of individual choice goes no further in the transportation industry than is necessary to contribute to the successful waging of the war and the prevention of socialization of transportation, then the sacrifices called for should be—and doubtless will be—cheerfully made.

Transportation Fortunate in Its Overseers

The transportation industry is fortunate that it has been placed under a wartime governmental regime which contains none of the nazifiers who infest the government agencies dealing with most other branches of industry. In striking contrast to such other gov-

ernment agencies—where many of the heads are obscure schoolmasters, college boys and lawyers' apprentices whose present connections pay them salaries twice or three times as large as they ever earned before, and who, consequently, are always seeking to make their present jobs permanent—the Office of Defense Transportation is largely officered by men who have made considerable sacrifices in income in order to serve their country and the transportation industry in their present posts. The sooner the war is won and they are per-

mitted to go back to their usual occupations, the better off they will be. In our opinion, companies, associations and individuals in the transportation industry who are willing to make sacrifices commensurate with their country's danger, have little or nothing to fear from the Office of Defense Transportation. On the contrary, their long-run well-being will be secure to the degree that they co-operate with this office—and thus prevent the nazifiers in the government from making a case for still more stringent federal control of transportation.

Traffic Problems, Immediate and Post-War

The railroads have still got a competitive problem to look forward to—more serious, probably, than any which they have ever faced. The present period of intensive business gives them months in which to survey and forecast their post-war situation—and to get ready a full quota of measures to meet it. If they are not fully prepared at that time, it will be just too bad—because they know what to expect and they also have, providentially, been given time in which to prepare themselves. There need be no post-war Pearl Harbor for the railroad industry.

While no alert railroad organization will put post-war questions out of mind—but rather will assign competent men to full-time study of them—imperative needs of the present will require most of the attention of most railroad men. How many railroad men, and especially how many shippers, recall that absence of a transportation voice in the seats of the mighty in the last war was what permitted transportation to bog down?

Industrial managers (unless they have traffic experience, as few of them have) always take transportation for granted. They don't know how goods move. They just know that if they buy goods, in some mysterious manner, they turn up where they are wanted. All the troubles which industrial managers ever have with raw materials are concerned with quantity, quality and price. Transportation is a specialized job about which they know practically nothing—and transportation has been a surplus commodity for so long that no difficulties have arisen from it even to remind production people that transportation exists.

As a consequence, transportation is left out of their calculations. There was no transportation man on the recently supplanted SPAB board. There is no transportation man on the new War Production Board. Its members are Supply Chief Donald Nelson, Vice-President Wallace, Navy Secretary Knox, War Secretary Stimson, Commerce Secretary Jones, OPM Director Knudsen, OPM Co-Director Hillman, Price Administrator Henderson, Lend-Lease Hopkins. Despite the recognized accomplishments of these men, it is doubtful that any of them comprehend what a job it is to keep the supply of transportation—which gets no special attention—up to the supply of other commodities, to the production of which they are turning all the tremendous wartime powers of the federal government.

Transportation, of course, has its able spokesman in Mr. Eastman—but Mr. Eastman is not a member of the new War Production Board. He will not be present to remind the Board members, when they set a production goal for this or that commodity, that they must also include a provision for transportation facilities in their plans. Of course, when the Board has the time to spare, and happens to think about it, they may call Mr. Eastman in and tell him they have a couple of tons of steel left over, and would he like to have it for transportation.

The unrealistic attitude of these production authorities toward transportation is perfectly illustrated by their nonchalance at six months' repeated pleading by Defense Commissioner Ralph Budd that they bestir themselves about getting materials needed for railroad equipment. They finally acted—but only to allocate a reasonable supply of steel for two months. In other words, it took *six months* of eloquence by Mr. Budd, fortified by Mr. Eastman and the I. C. C., in order to get the SPAB board to assign the railroad equipment program *two months'* reasonable requirements of steel. And yet these gentlemen will be very much provoked if the supply of other materials to which they devote all of their attention is delayed by a shortage of transportation which they are too busy to attend to at all.

The railroads are far better organized to meet the present war demands than they were in 1917. The same is true of the shippers; and there are other transportation agencies now which did not exist in 1917. But organization cannot work miracles. It still takes cars and locomotives to move goods—and cars and locomotives are built out of steel, and the only place that steel can come from is from the War Production Board.

To your reporter it seems that the biggest job ahead of transportation men today, whether they are on the carrier or the shipper side of the fence, is to try to get the production side of industry and government to understand that transportation is a commodity which enters into the manufacture of all other commodities, and that there cannot be an adequate supply of other commodities if the supply of transportation is disregarded.

How else can the War Production Board have this necessary picture always before it, except by having Mr. Eastman as a member of that board?



The Objective of Grade Crossing Elimination or Protection Should Be the Elimination of Maximum Hazard With A Given Sum of Money



Formula Gives Accident Hazard at Grade Crossings

Ratings are based on railroad and highway traffic and the type of existing protection, and are to be used as a factor in determining priority for elimination or protection

By L. E. Peabody* and T. B. Dimmick†

HIGHWAY engineers have been attempting for some time to develop a method of measuring the need for railroad-highway grade crossing separation or protection, and of stating this need in the form of a numerical rating. Many plans, founded on studies of the various basic relationships, have been proposed. Generally, the rating has been reached by assigning coefficients to various factors connected with the individual crossing and inserting these coefficients in a formula. Because the coefficients chosen were frequently the result of estimates, the ratings have often lacked uniformity and were sometimes thought to be biased.

Hazard Not the Only Factor

The elimination or protection of railroad grade crossings should not depend solely upon the inherent hazards of the crossings. A priority program made up on such a basis, even if perfect ratings of inherent hazard were available, might result in exhaustion of funds with the separation of a few very dangerous crossings. A wiser

distribution of the funds might permit the separation, or protection, of a much larger number of crossings involving an aggregate hazard elimination much in excess of that resulting from the first program. The more valuable measure would be based upon the cost per unit of hazard reduction, and the objective should be the maximum of hazard elimination with a given sum of money.

The evaluation of objectionable grade crossing features is usually based on one or both of two considerations—the relative potential danger to human life, or the relative loss of time to highway vehicles. In considering rural grade crossings it is believed that the hazard to life is more important than the time factor. In rural areas trains move faster than in urban districts, and the time loss at crossings will not be as serious a matter generally, although it may be a source of annoyance. The method discussed in this paper deals with the measurement of the hazard at grade crossings as one means of evaluating the need of separation or protection.

Preliminary to the development of the hazard formula described herein, a large amount of information was collected by the various highway planning surveys in all sections of the country concerning rural crossings at

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which accidents had occurred. Data concerning 3,563 such crossings were furnished by the planning survey organizations of 29 states. This information consisted of a description or sketch of each crossing, a statement of the highway and railway traffic using the crossing, and a description of the accidents that had occurred in a five-year period.

The description of the crossing included the clear view distances measured along the tracks from points on the highway 300 ft. from the crossing, the gradient of the highway on either side of the crossing, the alinement of the highway at the crossing, the type of highway surface, the number of tracks crossed, the angle of intersection of the highway with the railway, and other special features affecting the safety of the crossing. Also, any type of protection that had been installed at the individual locations was described. Data concerning the average daily highway and train traffic were generally subdivided to show the division between passenger-car and commercial traffic on the highways and the division between high-speed, medium-speed, and standing or switching trains, on the railroads. Finally the number of accidents, including the numbers of persons killed and injured, were given and the accident causes which could be determined were reported. This information covered a period of five years, generally from 1932 to 1936 inclusive, and furnished a basis for determining the relationship between the number of accidents and some of the factors contributing to these accidents.

Local Conditions Also a Factor

The formula for the rating of crossings derived herein is general and does not take completely into account special local conditions that greatly affect the true hazards at a given crossing. It has the advantage of objectivity but does not take into consideration the effects of some of the specific conditions peculiar to the individual crossing. For example, there are crossings where every train movement is guarded by brakemen who serve as flagmen. These crossings show a statistical movement of a certain number of trains per day, while from the standpoint of true hazard (because of the protection given each train movement), there are actually no trains per day.

Any formula developed through the use of accident experience must be general in application because of the wide variety of conditions encountered. Nevertheless, a rating of crossings upon a basis of knowledge of local conditions alone is subjective, and suffers from failure to take accurately into account the effect upon the hazard of the amount and type of highway and railway traffic, the protective devices in operation at the crossing, and the physical characteristics of the crossing and its approaches, such as angle of vision, sight distance, number of tracks, grades of the approach highways, etc.

Because of the conditions just cited it would seem best to use any formula in conjunction with a knowledge of local conditions. To be sure, it is difficult to know how much to modify the formula for hazard rating by consideration of local conditions such as those mentioned above. However, a rating of the crossings of a state, made upon the basis of the formula, may be compared with ratings made independently by several individuals who are well acquainted with local conditions surrounding individual crossings. Priority lists for elimination or protection of crossings, arrived at in such fashion, will combine the best features of both methods.

A study was first made of the data submitted to determine the accident trend caused by variations of the different factors applying at the crossings. Several of

these items are qualitative and suitable preliminary coefficients were determined on a basis of traffic per accident. This study indicated that, considering traffic, both highway and train, and type of protection, a definite trend was easily obtainable. Other items, although they probably influenced the safety or hazard at individual crossings, when considered in combination indicated no average trend or one too indefinite to make its use practicable. The results of this preliminary study indicated,

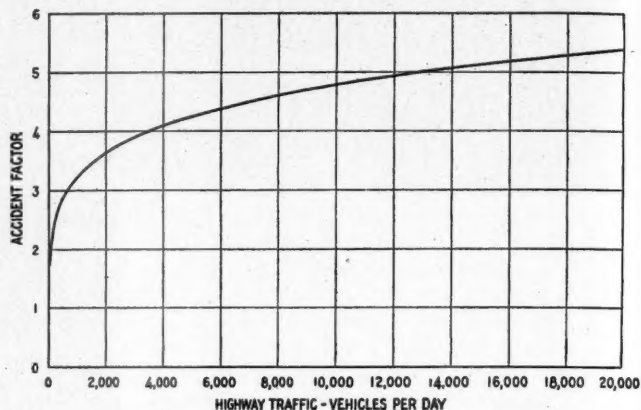


Fig. 1—Relation Between Highway Traffic and Accidents, H^a

therefore, that traffic and protection were the only factors that could be used with confidence to rate the crossings on an average accident basis.

Protection Coefficients Developed

Preliminary coefficients were determined for the various common types of protection by determining the average number of "exposure units" which passed over all crossings of each type of protection for each accident which had occurred at those crossings. The exposure units were obtained by multiplying the average daily highway traffic by the average daily train traffic. These products were divided by 100 to reduce the size of the figure and by the number of accidents for each type of protection. The equation used in determining the coefficient for each type of protection was as follows:

$$P = \frac{1}{N} \sum \left(\frac{H \times T}{100 A} \right) = \frac{1}{100 N} \sum \left(\frac{H \times T}{A} \right) \quad (1)$$

where

P = the protection coefficient for a type of protection,
 N = the number of crossings in a type group,
 H = the highway traffic at each crossing,
 T = train traffic at each crossing, and
 A = number of accidents.

Using the above formula, the following preliminary protection coefficients were determined:

Type of protection:	Preliminary protection coefficient
Signs	19
Bells	29
Wigwag	56
Wigwag and bells	63
Flashing lights	96
Flashing lights and bells	114
Wigwag and flashing lights	121
Wigwag, flashing lights, and bells	147
Watchman, 8 hrs.	119
Watchman, 16 hrs.	180
Watchman, 24 hrs.	228
Gates, 24 hrs.	241
Gates, automatic	333

A study of this list of coefficients will reveal several interesting comparisons. It will be noted that bells were approximately one and one-half times as effective in pre-

venting accidents as the signs alone. It is likewise shown that wigwags were more effective than bells, and flashing lights were more effective than wigwags. It is also interesting to note that a combination of any two of these types of protection was more effective than either type alone, although in all cases the index for the combination was less than the sum of the individual indices. These coefficients are of particular value when circumstances indicate that the maximum of hazard reduction will result from improvement of the protective devices at a large number of crossings rather than as a result of the same expenditure for the elimination of a few crossings.

Using the highway traffic, the train traffic, and the protection coefficient as independent variables and the number of accidents as the dependent variable, a correlation was made of the data, using the following equation:

$$I = C \frac{H^a \times T^b}{P^c} + K \quad (2)$$

where

I = probable number of accidents in a 5-year period (this figure to be used as the hazard rating),

H = highway traffic—average daily number of vehicles,

T = train traffic—trains per day,

P = protection coefficient,

C = constant,

K = additional parameter, and

a , b , and c = fractional exponents.

Equation Gives Hazard Index

The probable number of accidents which would occur at a crossing in a five-year period was assumed to be a

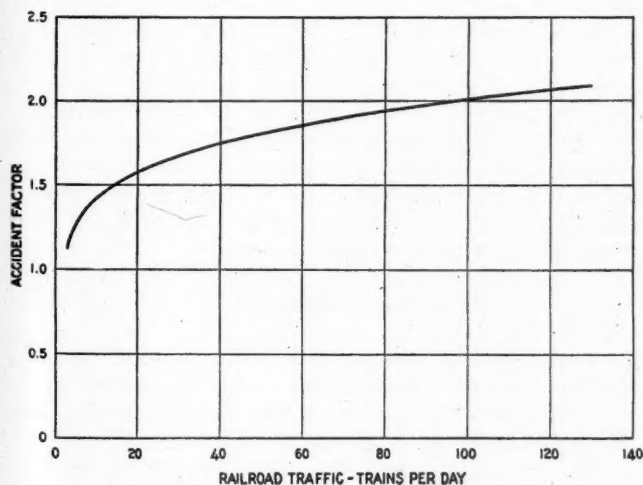


Fig. 2—Relation Between Railroad Traffic and Accidents, T^b

sufficient index of the hazard at a crossing. From the correlation that was made it was found that the index could be calculated from the following equation:

$$I = 1.28 \frac{H^{0.170} \times T^{0.151}}{P^{0.171}} + K \quad (3)$$

As an aid in calculating the hazard rating, curves were plotted showing the relationships between the hazard on the one hand and, on the other, the highway traffic (Fig.

1), the train traffic (Fig. 2), and the type of protection (Fig. 3). From these data the hazard values for each contributing item considered may be determined, that is H^a , T^b , and P^c , and these inserted in Equation 2. When

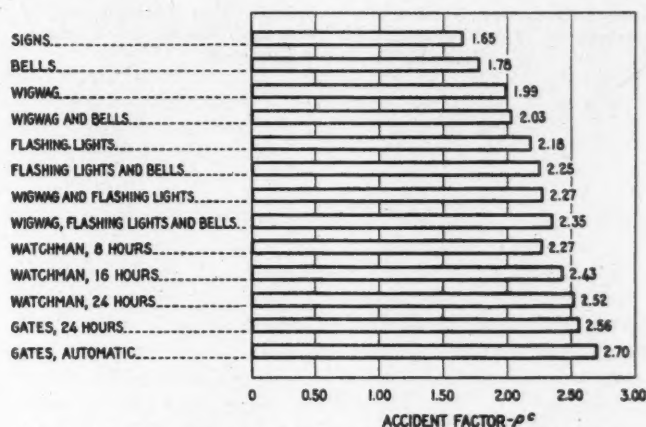


Fig. 3—Accident Factors (P^c) for Various Types of Protection

these factors are inserted, the formula may be reduced to the following:

$$I = I_u + K \quad (4)$$

where

I = probable number of accidents in a 5-year period (the hazard rating),

I_u = an unbalanced rating, and

K = an additional parameter.

The factor K can be obtained from Fig. 4 which gives the variation of this factor for values of the unbalanced rating I_u .

The use of this formula may be illustrated by applying it to an actual crossing. For this purpose a rural crossing in Oregon was chosen. The average daily highway traffic is 3,442 vehicles; the average train traffic is 22 trains each day. The crossing is protected by wigwags. From Fig. 1, the hazard factor due to a highway traffic of 3,442 vehicles per day is found to be 3.99. From Fig. 2 the factor due to the train traffic of 22 trains per day is found to be 1.59; and from Fig. 3 the factor for the wigwag type of protection is found to be 1.99. Substituting these figures in Equation 2, it is found that the

hazard index is equal to $1.28 \frac{3.99 \times 1.59}{1.99} + K$, or

$4.08 + K$. From Fig. 4, K is determined to be +2.58 for a value for I_u of 4.08, and, with this figure for the parameter, the hazard index is found to be 6.66.

The Formula Tested

To test the reliability of the formula, 123 crossings, the data concerning which were not used in the derivation of the formula, were rated by means of the formula. A large majority of these crossings were relatively safe, having had no more than three accidents recorded in the five years during which the accidents were reported. Some of them were at locations at which from six to eight accidents had occurred. In the accompanying table the estimated number of accidents at these crossings is compared with the actual number of accidents recorded. These data indicate that the computed number of accidents is generally in excess of the actual number of

accidents at the low-accident crossings. These differences are not of great importance because priority information will ordinarily be of most value at a few of the most dangerous crossings. Although the sample of

Average Computed Number of Accidents, Using Formula, at 123 Crossings in 10 States, Compared to Actual Number of Accidents Recorded at Those Crossings

Number of Crossings	Actual Number of Accidents	Average Computed Accidents
15	1	1.21
47	2	1.84
39	3	3.05
11	4	3.69
3	5	5.20
5	6	6.18
1	7	7.36
2	8	8.37

the high-accident crossings is small, a fairly consistent trend is noticeable.

The study of the various factors which might affect the hazard at a crossing indicated that several of these items exerted little influence on the calculation of the

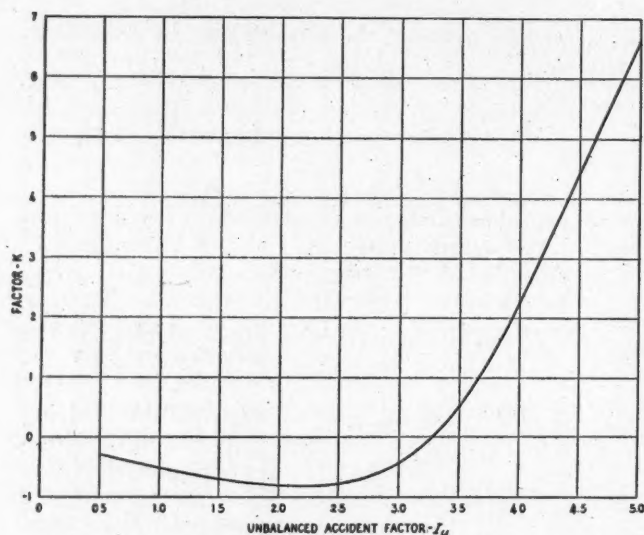


Fig. 4—Relation Between Unbalanced Accident Factor, Computed from Formula (2), and the Smoothing Factor

number of accidents at the locations and, therefore, were of little value in measuring the hazard. Although the effect of the physical factors was not sufficient to merit their inclusion in the hazard-rating formula, these data should be considered in the assignment of priorities within groups of crossings of the same rating. The formula may be used to calculate the hazard ratings of all the crossings, and then crossings with approximately the same hazard rating may be grouped and tabulated together with the physical factors (grades of approaches, angles of intersection, sight distances, etc.). Priorities within these groups may then be established on the basis of the relative hazards of the physical factors. The relative importance of each physical factor, or combinations of such factors, must be determined.

Additional Factors

The probable number of accidents which may be expected to occur at any crossing cannot be obtained by means of this formula with a high degree of accuracy. While the factors used account for a large part of the variation in the accident probability, there are other variables that were not reported but probably have a definite

influence. Probably there are also psychological factors that in many cases greatly affect the safety or danger of crossings but which cannot be measured numerically. The index rating, therefore, is no more than an indication of the variation of the number of accidents in conjunction with the variation of the factors considered, and other items must be weighed before any set of crossings can be assigned rating numbers.

A portion of the probable error in the calculated accident record, or hazard index, may be due to the use of average daily figures for traffic. Inasmuch as large variations in these figures are apt to occur, it is probable that few of the accidents occurred at times when any of the conditions were as assumed by the measuring data. The peak highway traffic is generally found in the months of July and August, but the largest portion of the accidents occurs in November and December.

Almost as many accidents occur in the night hours as during the day hours although the hourly traffic is less at night than during the day. The greatest frequency of accidents is usually found between 11 p. m. and midnight, when traffic is comparatively light. Likewise, train traffic may vary considerably from year to year, and train speed will vary from the average figures reported. Cases where the protection was changed during the five-year period were omitted from consideration. It is believed that the protection coefficients are relatively constant for each type of protection listed. It is probable, however, that accident factors for highway traffic and train traffic would be changed somewhat if true values at the time of the accident could be obtained.

It is possible that traffic laws in the various states have some effect on the number of crossing accidents which occur. The large variation in the grade-crossing accident records of the various states must be due to causes other than chance; and, since states with high or low traffic volumes are found to have good and bad accident records indiscriminately, it appears that the traffic regulations may have some bearing on the variations in these figures.

Another important fact to be considered is that the number of accidents that may occur at any crossing in a five-year period is comparatively small. Public opinion has forced most of the states to eliminate those crossings that were obviously the most undesirable or at which an excessive number of accidents occurred. Only one accident had occurred at most of the crossings for which the data were submitted, and for only a few of the crossings were five or more accidents reported.

Other Formulas

Many of the highway planning survey organizations and others interested in this phase of highway planning have developed formulas for rating all grade crossings, in which the coefficients are based on judgment. These formulas are approximate and probably do not give a complete and unbiased evaluation of the hazard. It is obviously impossible to assign numerical values to all situations and combinations of conditions with the assurance that these values are even approximately correct. However, when data are uniformly applied through one of these formulas, valuable relative information can be obtained. Several of the planning surveys have been able to collect more detailed information than was generally acquired and have utilized this detailed knowledge in their evaluation formulas. The inclusion of the additional information has aided greatly in the development of priority lists that coincided with the best public and engineering opinion.

The plan of rating all crossings which has been used

by the Utah and Idaho highway planning surveys includes a good example of an approximate formula which, although its coefficients and weights are based on judgment, apparently produces a reasonably satisfactory rating. More detailed information than is generally available in other states was collected and used in the development of the priority ratings. The formula, though based on earlier studies made in Illinois and Connecticut, includes some valuable additions.

The index of hazard used in Utah and Idaho is calculated from a formula that assumes that hazard to the public is a function of the volume of vehicular and railroad traffic and of the nature of these movements over the crossing and the physical conditions existing there. Factors for the various elements entering into the hazard of the crossings have been selected with which to weight the items in accordance with their relative importance. These factors are substituted in the following formula:

$$\text{Hazard index (HI)} = VT (T_1 + S + A + N + C + M)$$

where

- V = factor representing volume of vehicular traffic,
- T = factor representing volume of train traffic,
- T_1 = train type and speed,
- S = view factor,
- A = intersection angle,
- N = number of tracks,
- C = highway alinement, and
- M = special conditions.

It is probable that the outstanding addition made by the Utah and Idaho formula to previous grade crossing formulas is the item covering type and speed of train movement. It is contended in these states that the likelihood of inaccurate judgment on the part of a vehicle operator increases roughly in proportion to the train speed and the time that the train blocks the crossing. Information concerning the type and speed of trains should add considerably to the value of a priority rating based on a hazard formula.

The Oregon Formula

A study of grade crossing accidents in Oregon developed some interesting suggestions that appear to be well worth considering. It was concluded in this state that the general formula used by most states was unnecessarily complex. For example, the Oregon study indicated that road surface conditions, sight distance, angle of intersection, number of tracks, and alinement had little or no effect on the number of accidents. It was not contended that these factors did not affect accident hazard, but it was assumed that adverse conditions caused enough motorists to exercise special caution to balance the undesirable conditions to such a degree that no more accidents occurred at crossings with poor conditions than if conditions were normal.

The following simple formula was used in Oregon to rate all crossings:

$$IH = VT_1 (S_v + S_t) (1 + A)$$

where

- IH = index of hazard,
- V = average daily vehicular movements,
- T_1 = average daily train movements (weighted to take care of the greater probability of night accidents),
- S_v = vehicular speed factor,
- S_t = train speed factor, and
- A = accident record.

The most interesting item introduced by the Oregon highway planning survey is the inclusion of a factor concerning the traffic, both vehicular and train, during the hours of darkness. Their studies indicated that, while traffic volume generally decreases after dark, the accident rate increases. This tendency was pronounced, and it was determined that motor vehicle and train movements at night in urban areas were potentially 3 times as dangerous as daylight movements. Records of traffic movement were carefully divided into day and night traffic and the latter was given greater weight in accordance with these findings.

Additional Data Would Help

It appears from the study that has been made that some additional information should be obtained concerning crossing accidents and the conditions existing at the crossings at the time of their occurrence. Better estimates of the highway and railroad traffic for the day and hour of the accident would be helpful. More complete descriptions of the accidents and the possible causes contributing to them should be given, instead of using such stock phrases as "failed to observe signal" or "carelessness of driver." Reports concerning the causes of accidents, prepared by a public officer trained to observe the necessary conditions and details, would be preferable to reports required of railroad officials. It is probable that a comparatively small amount of more reliable and more representative data would make possible the development of a formula that would be considerably more reliable than those given in this article.

Regardless of the dependability of the computed hazard rating for any crossing or group of crossings, this index should be used only as one type of measure of the need of crossing elimination. In some locations where motor-vehicle traffic volume is very low, protection may be desirable to protect railroad property, especially fast-moving trains, from slow-trucks or other large vehicles that are a hazard to the train passengers, crew, and equipment. As many factors as can be obtained should be considered, along with the hazard rating.

The plan developed by the Maryland highway planning survey has been adopted by the planning surveys in several other states to aid in the selection of crossings for elimination and in the assignment of priority numbers to these crossings or to groups of crossings. In this plan data concerning the more important crossings, as measured by highway and railroad traffic, are tabulated. These tabulations are submitted to several engineers concerned, including railroad men, and a rating for each crossing is requested. The several ratings assigned are then combined by scoring points for first choice, second choice, etc., and priority ratings are thus obtained. When a sufficient number of crossings have been assigned priority numbers for elimination, the balance may be studied concerning their protection needs.

It is believed that the hazard rating computed from the formula described herein and the protection coefficients suggested will be of value when combined with other independent ratings. Any rating made by individuals, as suggested above, could be combined with one made by using the hazard formula outlined in this report. A priority listing made on the basis of exposure (railroad traffic times highway traffic) as related to cost of elimination might also be included. The combination of these data in each state should point to certain crossings or groups of crossings that should be eliminated and to others that should have some type of protection or at which the provision of better protection would be indicated.

Casualties Decrease — Locomotive Defects Increase

Director of the Bureau of Locomotive Inspection in annual report cautions against waste from temporary repairs

AN increase of one per cent in the number of locomotives inspected which were found defective and an increase of 15 per cent in the number of locomotives ordered withheld from service because of the presence of defects which rendered the locomotive immediately unsafe were recorded in the annual report of John M. Hall, director of the Bureau of Locomotive Inspection, to the Interstate Commerce Commission for the fiscal year ended June 30, 1941. During the year 153 accidents were caused by the failure of some part of the steam locomotive, a decrease from 164 during the preceding year. The number of persons killed in these accidents decreased from 18 to 15, and the number of persons injured, from 225 to 182. Of the above number of accidents, 43 were caused by the failure of some part or appurtenance of the steam locomotive boiler, resulting in the loss of 12 lives and injury to 64 persons. This also shows a distinct improvement over 1940, when there were 67 such accidents causing the loss of 16 lives and injury to 110 other persons.

The chart shows the trend in the relationship between the percentage of defective steam locomotives and the number of accidents and casualties resulting from failures since 1917.

Boiler Explosions

All of the 11 boiler explosions that occurred in the fiscal year were caused by overheating of the crown sheets due to low water. There was a reduction of 1 in the number of persons killed and an increase of 14 in the number of persons injured from this cause as compared with the preceding year. Four of the explosions were particularly violent and caused the death of 11 employees and the injury of 20 employees, 5 Pullman employees, and 4 non-employees. Two employees were killed and 9 employees were injured in the remaining 7 accidents in which the explosions were less violent.

Boiler and appurtenance accidents other than explosions resulted in the death of one person and injuries to 35 persons; this is a reduction of 3 deaths and 60 injuries as compared with the preceding year.

Our investigations of two of the explosions revealed serious neglect in not maintaining the boiler-feeding devices in condition to perform their intended function. Repeated reports of impairment of capacity of these devices had been made over considerable periods of time prior to the explosions. All of these reports were signed for purporting to show that work had been done on the parts reported but later reports showed that the defective conditions continued until the explosions occurred.

Serious neglect is also evident in some instances in the matter of maintaining water-level-indicating devices in good condition, which includes thorough cleaning of gage cocks, water-glass cocks, and water-column connections each time the boilers are washed, or more frequently if needed to prevent stoppages or partial stoppages of the

water and steam passages, inspections and repairs sufficiently often and thorough to insure that these devices operate and indicate as intended, and the condition and proper placement of water glass lamps.

Extension of Time for Removal of Flues

Applications to the number of 1,182 were filed for extensions of time for removal of flues, as provided in Rule 10. In 98 of these cases the condition of the locomotives was such that extensions could not properly be granted. Nineteen were in such condition that the full extensions requested could not be authorized, but extensions for shorter periods of time were allowed. Seventy-two extensions were granted after defects disclosed by our investigations were required to be repaired. Twenty-nine applications were canceled for various reasons. Nine

Table I.—Reports and Inspections—Steam Locomotives
Year ended June 30

	1941	1940	1939	1938	1937	1936
Number of locomotives for which reports were filed	43,236	44,274	45,965	47,397	48,025	49,322
Number inspected.	105,675	102,164	105,606	105,186	100,033	97,329
Number found defective	9,570	8,565	9,099	11,050	12,402	11,526
Percentage inspected found defective	9	8	9	11	12	12
Number ordered out of service..	560	487	468	679	934	852
Number of defects found	37,691	32,677	33,490	42,214	49,746	47,453

hundred and sixty-four applications were granted for the full period requested.

Locomotives Propelled by Power Other Than Steam

There was an increase of four in the number of accidents occurring in connection with locomotives other than steam and an increase of four in the number of persons injured as compared with the preceding year. No deaths occurred in either year.

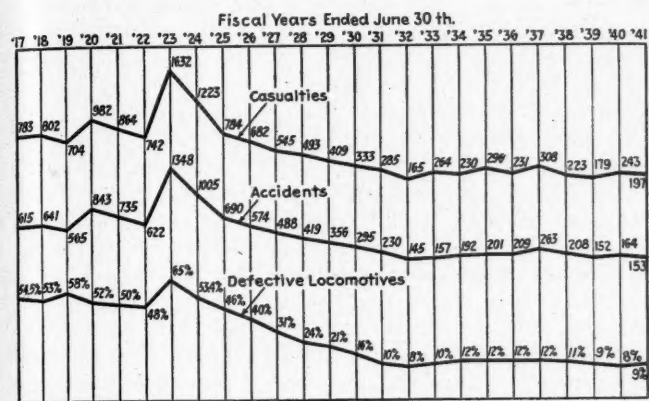
During the year six per cent of the locomotives inspected by our inspectors were found with defects or errors in inspection that should have been corrected before the locomotives were put into use; this percentage is the same as in the preceding year. There was an increase of five in the number of locomotives ordered withheld from service by our inspectors because of the presence of defects that rendered the locomotives immediately unsafe.

Specification Cards and Alteration Reports

Under Rule 54 of the Rules and Instructions for Inspection and Testing of Steam Locomotives, 225 specification cards and 6,786 alteration reports were filed, checked, and analyzed. These reports are necessary in

order to determine whether or not the boilers represented were so constructed or repaired as to render safe and proper service and whether the stresses were within the allowed limits. Corrective measures were taken with respect to numerous discrepancies found.

Under Rules 328 and 329 of the Rules and Instructions for Inspection and Testing of Locomotives Other



Relation Between Defective Steam Locomotives, Accidents and Casualties Resulting from Locomotive Failures During 25 Years

Than Steam, 447 specifications and 39 alteration reports were filed for locomotive units and 100 specifications and 91 alteration reports were filed for boilers mounted on locomotives other than steam. These were checked and analyzed and corrective measures were taken with respect to discrepancies found.

Legal

Based upon investigations made by the Bureau, one case of violation of the rules and instructions for inspection and testing of steam locomotives and tenders and their appurtenances, comprising 17 counts, was transmitted to a United States attorney for prosecution. This case is now pending in the district court.

No formal appeal by any carrier was taken from the decisions of any inspector during the year.

Locomotives and Accident Prevention

The purpose of the Locomotive Inspection Act is to promote the safety of employees and travelers upon rail-

Table II.—Accidents and Casualties Caused By Failure of Some Part of the Steam Locomotive, Including Boiler, or Tender

	Year ended June 30					
	1941	1940	1939	1938	1937	1936
Number of accidents	153	164	152	208	263	209
Per cent increase or decrease from previous year	6.7	7.9*	26.9	20.9	25.8*	4.0*
Number of persons killed	15	18	15	7	25	16
Per cent increase or decrease from previous year	16.7	20.0*	114.3*	72.0	52.2*	44.8
Number of persons injured	182	225	164	216	283	215
Per cent increase or decrease from previous year	19.1	37.2*	24.1	23.7	31.6*	19.5

* Increase.

roads. The original act became effective July 1, 1911, and to and including 1915 it applied only to boilers and their appurtenances; during that period there was a steady and substantial improvement in the condition of these parts. An amendment, effective early in the fiscal year ended June 30, 1916, extended the provisions of the

act to include the entire locomotive and thereafter the scope of the work of the Bureau was very considerably broadened.

The percentage of locomotives inspected by our inspectors which were found defective in the year ended June 30, 1917, was 54.5, and thereafter, until after the fiscal year ended June 30, 1923, in which 65 per cent of the locomotives inspected by our inspectors were found defective, it was not possible to effect improvement due to absence of sufficient appropriations to further the work of the Bureau.

Vast strides have been made in improving the general condition of locomotives since 1924 due to increased funds available to the Bureau and a realization on the part of the railroads that more effective use can be made of locomotives maintained in condition to comply with the established rules and instructions. The percentage of locomotives found defective in the fiscal year ended June 30, 1940, reached a low of eight, and this increased to nine per cent in the fiscal year ended June 30, 1941. This represents one per cent recession in the condition in the fiscal year ended June 30, 1941, as compared with the preceding year. There was a material increase in the total number of defects found and reported by our inspectors as compared with the preceding year, and there was an increase of 15 per cent in the number of steam locomotives ordered withheld from service because of the presence of defects that rendered the locomotives unsafe.

Under ordinary conditions these results need not necessarily be particularly alarming since some variations can be expected from year to year; however, under pres-

Table III.—Accidents and Casualties Caused by Failure of Some Part or Appurtenance of the Steam Locomotive Boiler¹

	Year ended June 30							
	1941	1940	1939	1938	1937	1936	1915	1912
Number of accidents	43	67	52	59	63	75	424	856
Number of persons killed	12	16	15	5	19	10	13	91
Number of persons injured	64	110	55	59	73	80	467	1,005

¹ The original act applied only to the locomotive boiler.

ent circumstances special significance is necessarily attached thereto because of the shortage of material and skilled labor. All possible measures should be taken to increase the thoroughness of inspections and to apply timely and substantial repairs to all parts upon which there is any doubt as to safety and dependable performance.

The practice, still too often indulged in, of applying temporary repairs in the hope that the locomotive will make a successful trip and that more adequate repairs may be applied thereafter when the time is most convenient, has been productive of many failures on the line of road; these failures, in addition to increasing the peril to life and limb of employees and others and increasing the ultimate cost of repairs, result in delay to the train involved and frequently affect the orderly movement of other trains. Avoidance of failures of locomotives on the line of road is an essential component of satisfactory railroad performance and it is therefore essential that the practice of applying temporary repairs of the character indicated be reduced to the absolute minimum.*

Before a locomotive is started on any trip it should be known that all parts and appurtenances are in safe and suitable condition for service rather than to assume, as is sometimes done, that if the locomotive arrived under

* The emphasis is ours.—EDITOR.

its own power it can go out again. All parts to which repairs have been made, the condition or capacity of which may not be determinable by visual inspection, such

and construction of locomotives since the inception of the use of steam power on railroads and improvements will continue, in some measure, in new production during the

Table IV—Number of Casualties Classified According to Occupation—Steam Locomotive Accidents

	Year ended June 30											
	1941		1940		1939		1938		1937		1936	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Members of train crews:												
Engineers	5	41	5	70	4	46	3	70	8	106	4	75
Firemen	5	68	6	49	6	66	2	80	5	78	6	72
Brakemen	3	21	4	24	2	18	..	31	3	30	3	28
Conductors	..	8	1	4	..	5	..	6	1	18	..	13
Switchmen	..	6	..	4	..	6	..	7	..	10	..	2
Roundhouse and shop employees:												
Boilermakers	..	..	1	3	1	1	..	2	2	2	..	..
Machinists	1	3	..	3	..	2	..	..	..	2	..	4
Foremen	..	2	..	..	..	..	..	1	..	..	..	3
Inspectors	..	..	..	..	..	..	..	1	..	..	..	2
Watchmen	1	2	..	1	..	1	2	..	1	1	1	1
Boiler washers	..	..	..	..	..	..	..	1	..	..	..	..
Hostlers	..	3	..	2	..	1	..	6	..	9	..	3
Other roundhouse and shop employees	..	1	..	1	..	2	..	1	..	3	..	3
Other employees	..	9	1	20	..	2	..	3	1	14	..	5
Nonemployees	..	18	..	44	2	14	..	7	4	10	2	4
Total	15	182	18	225	15	164	7	216	25	283	16	215

as air compressors, injectors, and feed water pumps, should be appropriately tested for the output required under service conditions in addition to the usual examinations made when a locomotive is being prepared for service, since mere observation that these parts "work" when a locomotive is at the terminal is not sufficient to determine whether or not their capacity has been restored. In investigations of accidents we sometimes find reports on the defect that caused the accident repeated many times until failure eventually occurred, together with signatures on the reports indicating that the reported work had been done, or at least that repairs to the reported defects had been attempted each time a report was made. This is proof that the safe repairs required to secure dependable operation of the locomotive had not been made and that labor and time had been wasted.*

Complexity of the various appurtenances installed on modern locomotives, coupled with the placing in service of a large number of older locomotives which have been out of service for periods ranging up to 10 years or more, many of which are practically obsolete and therefore not well adapted to the giving of satisfactory performance under present conditions, and the intensive use of all locomotives now in service necessitate increased vigilance on the part of all concerned to effectuate the purpose of the act and to comply with the proclamation of the Presi-

emergency. All of the outstanding improvements in locomotive design and construction, as with practically all other mechanisms, have been brought about by the process of evolution rather than revolution. All have gone through periods of trial and adjustment, and many have been materially changed from the original conception before satisfactory performance could be obtained.

It therefore cannot be expected that major changes in design, construction methods, or practices will produce any appreciable beneficial effect in time to ease the cur-

Table VI—Accidents and Casualties Caused by Failure of Some Part of Appurtenance of Locomotives Other Than Steam

	Year ended June 30				
	1941	1940	1939	1938	1937
Number of accidents	11	7	5	4	12
Number of persons killed	..	..	..	..	..
Number of persons injured	11	7	5	4	14

rent and prospective general situation. On the contrary, attempts to produce such changes, due to the accompanying necessary variation in established practices of the builders and the railroads, the necessity for close observation and supervision over the trial periods, and the changes in or the transfer of skill that may be required of the builders' employees and the railroads' maintenance forces, would delay production of locomotives, absorb manpower that could well be used for immediate and more important purposes, and result in delays to repairs because of interruptions in the established orderly work of the maintenance forces. In the absence of certainty that the merits of any major changes in design and methods of construction that may be proposed would warrant immediate and widespread adoption irrespective of the effects on production and the skilled labor situation, efforts to build and use locomotives involving designs and constructions that have not fully justified themselves through general use should, for the common good, be held in abeyance until the cessation of the emergency.

THE PENNSYLVANIA HAS LEASED from the City of New York piers 49 and 52, North river to supplement its present freight handling facilities on the Manhattan waterfront. Pier 49, at the foot of Bank street, measures 744 ft. in length by 126 in width and Pier 52, at the foot of Gansevoort street, 754 ft. in length by 72 ft. in width.

Table V—Reports and Inspections—Locomotives Other Than Steam

	Year ended June 30					
	1941	1940	1939	1938	1937	1936
Number of locomotive units for which reports were filed	3,389	2,987	2,716	2,555	2,416	2,361
Number inspected	5,558	4,974	4,581	4,024	3,615	3,118
Number found defective	319	298	260	274	328	252
Percentage inspected found defective	6	6	6	7	9	8
Number ordered out of service	21	16	14	9	24	11
Total number of defects found	905	766	696	769	991	674

dent, dated August 18, 1941. This proclamation calls upon the National Safety Council to mobilize its nationwide resources in leading a concerted and intensified campaign against accidents, and also calls upon every citizen, in public or private capacity, to enlist in this campaign and do his part in preventing wastage of human and material resources of the nation through accidents.

Continuous improvements have been made in design

Bureau of Safety Annual Report

WASHINGTON, D. C.

CURRENT railroad traffic conditions "necessitate increased inspection and supervision" if there is to be a maintenance of safety standards "essential to uninterrupted flow of traffic and proper development and functioning of national-defense activities," said Bureau of Safety Director S. N. Mills in his annual report to the Interstate Commerce Commission which was made public this week. Reminding the commission of his pending recommendation calling for additions to the Bureau's force of signal inspectors, Mr. Mills anticipated that augmentation of other branches may also "become necessary to keep pace with increases in traffic and expansion of transportation facilities."

The report for the fiscal year ended June 30, 1941, is a 51-page document setting forth in the usual form the results of inspection of safety appliances on railroads together with information on hours-of-service records of railroad employees, installations of signaling, interlocking, automatic train-stop and train control facilities, and other activities of the Bureau. Leading up to his aforementioned comment on the current need for increased inspection and supervision, Mr. Mills had cited the August 18, 1941, proclamation wherein President Roosevelt "called upon all citizens in public or private capacity to engage in a campaign for the prevention of accidents."

Efficiency and Safety Go Hand in Hand

"Efficiency in railroad transportation," Mr. Mills observed, "is vital not only to the proper functioning of our industries but also to the free flow of the products of those industries. Efficiency can be attained only when a high degree of safety is provided and accidents are reduced to a minimum. . . . Current traffic conditions have introduced increased hazards. Cars which have been stored are being placed in service, cars in service are being utilized to a greater extent, increased numbers of trains are being operated, there has also been a material increase in the number of railroad employees who are engaged in or connected with the movement of trains, and extensive revisions of signal systems are in progress to expedite and safeguard increasing traffic. These conditions necessitate increased inspection and supervision to insure that safety is not sacrificed to the rush and hurry of the day, that defective equipment is not used in an effort to promote the convenience of the moment, and that there is no relaxation of the precautions and standards which are necessary for the safety of railroad operation and the protection of railroad employees who form the vital elements of an efficient transportation system."

Meanwhile Mr. Mills had reviewed the report's statistical presentation of the Bureau's work, commenting first on safety-appliance inspections. During the fiscal year under review a total of 1,119,690 cars and locomotives was inspected; 28,110 or 2.91 per cent were found defective, as compared with 2.51 per cent defective out of the 1,142,121 inspected in 1939-40. Included in the rolling stock inspected during fiscal 1940 were 23,660 passenger cars, of which 664, or 2.81 per cent, were found with defective safety appliances, 947 defects being reported. As indicated above, the 1940-41 inspections covered 22,431 fewer equipment units than those inspected in 1939-40. The decrease, the report ex-

plained, "was due primarily to the fact that during the fiscal year 1941 there were 486 less man-days devoted to inspection work than in the fiscal year 1940; 305 more man-days were devoted to accident-investigation work than in the fiscal year 1940; and, in addition, inspectors were on sick leave or leave without pay for 257 more man-days than in the fiscal year 1940."

Air-Brake Tests

Air-brake tests were made on 2,798 trains, consisting of 121,476 cars, prepared for departure from terminals, and the air brakes were found operative on 121,378 cars or 99.9 per cent of the total. That percentage, however, was attained only after 975 cars having defective or inoperative brakes had been set out, and repairs had been made to the brakes of 926 other cars in the trains. Similar tests on 942 trains arriving at terminals with 46,427 cars showed that the air brakes were operative on 98.49 per cent of the cars—the cars with inoperative brakes averaging three for every four trains tested.

Reference is made in the report to its predecessor's comment on "the discrepancy existing between safety-appliance equipment installed on streamline passenger-train cars, constructed in recent years, and specifications for safety appliances of passenger-train cars contained in the commission's orders of March 13, 1911." Also recalled is the previous report's mention of "the use by certain carriers of devices designed to make lack-blocks of tight-lock couplers inoperative in order to compensate for defects in the coupler which were productive of undesired separation of trains"; and of the use of "improper running boards" on steam locomotives, and "incorrect end and side handholds" on steam and Diesel-electric locomotives. "Progress in securing correction of these defective installations," the report added, "was made during the year and, with respect to safety appliances of streamline passenger-train cars, correction is nearly completed."

The record as of June 30, 1941, on the number of interchange freight cars equipped with AB brakes shows that 142,745 cars, including 65,719 new cars, were thus fitted during the fiscal year under review. That brought the total number of railroad-owned cars equipped to 483,240 or 27.7 per cent of the cars owned. Private car lines had equipped 37,901 cars or 13.69 per cent of their ownership. Thus only 25.78 per cent of the cars used in interchange service were equipped with AB brakes as of last June 30, which, as the Bureau noted, marked the expiration of 65 per cent of the 10-year period allotted for making this improvement on all interchange cars by January 1, 1945. As it had done in its four previous reports, the Bureau again called this "unsatisfactory progress." Meanwhile, the Bureau has continued its cooperation with the Association of American Railroads to determine the proper cleaning period for AB brakes; and the results reported during the year "disclosed material improvement, largely due to the use of improved air strainers for preventing foreign matter from entering the valve mechanism."

During the year under review, 174 of the 755 railroads filing hours-of-service returns reported a total of 7,409 instances of all classes of excess service—an increase of 3,140 instances as compared with the previous year. Adverse weather conditions, derailments, and "land-slides, high water and fire" were the three most important causes of the 1,456 instances of excess service by train and engine service employees.

As of January 1, 1941, there were 65,691 miles of road (96,459 miles of track) equipped with automatic block signals. On the same date there were 10,627 miles

of road (20,580 miles of track) equipped with automatic train-stop, train-control and cab signal devices. During fiscal 1941, the commission acted upon 979 applications filed under the so-called signal inspection law of 1937, and 229 such applications were pending at the close of the year.

Alleged violations of the safety-appliance laws in 91 cases, comprising 153 counts, were transmitted to United States attorneys during the year; also, 12 cases, comprising 45 counts, alleging violations of the hours-of-service law. On June 30, 1941, there were pending in the various district courts 45 safety-appliance cases containing 77 counts, and nine hours-of-service cases containing 36 counts. The report's section on the Bureau's accident-investigation work shows that during 1940-41 the commission received reports of 2,414 derailments and 4,057 collisions; in these 183 persons were killed and 1,477 were injured as compared with 146 killed and 1,728 injured in 1939-40's 1,722 collisions and 3,568 derailments.

Express Rates Must Rise with Labor Costs

INCREASED labor costs, amounting to \$16,010,888, make necessary a 10-cent emergency charge on all 1. c. l. express shipments, according to W. A. Benson, vice-president in charge of accounts of Railway Express Agency, Inc., who testified before the Interstate Commerce Commission at St. Louis, Mo., on January 9, in support of emergency tariffs which this company issued on December 19, with an effective date of January 20, 1942. The emergency charge applies to all shipments, regardless of the number of packages. In this case, Acting Chairman Clyde B. Aitchison and Commissioner Walter M. W. Splawn sat as a suspension board to consider protests and determine whether the tariffs should be suspended. The commission can suspend, can approve or can permit the tariffs to become effective and then investigate whether the charge should be applied to all commodities and all shipments equally.

Mr. Benson testified that the adoption of the 44-hour week during the period between May 11, 1939, and October 1, 1940, has added \$4,197,682 to labor costs and that wage increases granted between August 14, 1941, and December 1, 1941, have added another \$11,075,290. He also testified that only about 34 cents out of the express dollar was paid to the carriers for the year ended July 31, 1941. "It seems obvious," he said, "that the present payments to the railroads for express privileges fall short of meeting the expenses of the railroads assignable to express transportation by a much greater amount than was found by Federal Co-ordinator Joseph B. Eastman for 1933 when 37 cents out of the express dollar were paid to the railroads for express privileges.

"In 1929," he continued, "the pay of employees was 72.87 per cent of total operating expenses and if the accounts for 1940 had included a full year of the increases in wages, the pay of employees would have been 80.09 per cent of total operating expenses. The express privileges proportion of the express dollar went down from 50.70 cents in 1929 to 38.87 cents in 1936 and 32.96 cents in 1940 and if 1940 had included a full year of the increases in labor costs, the express privileges proportion of the express dollar would have been only 24.81 cents.

"Taxes went from 0.6 cents of the express dollar in 1929 to 1.53 cents in 1936 and 4.23 cents in 1940. If the

wage increases had been in effect throughout 1940, express taxes would have amounted to 4.69 cents out of each express dollar."

In addition to increased labor costs of \$16,010,888, he said, unit prices of materials and equipment have risen substantially since 1939. Among the items which he listed, highway trucks increase in price 12 per cent, hand trucks 35 per cent, desks 34 per cent, and wrapping paper 33 per cent.

Emergency Charge Will Up Revenues \$17,000,000

C. A. Frey, vice-president in charge of traffic, testified that although some traffic will be lost as a result of the emergency charge, the total revenue will show an increase sufficient to offset the increased labor costs of \$16,010,888. He estimated annual express traffic at 170,000,000 shipments and the annual increase in revenue resulting from the emergency charge at \$17,000,000.

In discussing commodity traffic which moves at truck competitive express rates on the level of the first four or five classes of freight rates, he said, "While the application of the 10-cent emergency charge to that traffic represents an estimated increase of 6.51 per cent, it is our intention to revise the rates on that traffic to whatever basis is authorized in Ex Parte No. 148. The question of whether the 10-cent emergency charge shall continue to apply on that traffic in the event the 100-lb. rates are increased will have to be determined on the basis of conditions existing at the time. Express rates on milk and cream are generally the same as the rates of the railroads for handling milk and cream in their passenger service and since the railroads have asked permission to increase their rates, the question of what further adjustments of the express rates will be appropriate must be left for future determination."

Shippers of individual packages of gift fruit from Florida, Texas, California, Washington and Oregon and shippers of cut flowers from California to florists throughout the country were among those opposed to the emergency charge. Those engaged in mail-order businesses of small packages of fruit contended that a charge of 10 cents on a 10 lb. box would increase the express charge 20 per cent or to 64 cents and produce a disastrous effect upon their businesses. They were not opposed to a small increase in express charges. Shippers of cut flowers contended that present charges have been causing a large number of cancellations of orders and that if an additional charge of 10 cents per package is made, the number of cancellations will increase.

E. F. Scott, representing the American Butter Institute, protested against a charge of 10 cents per five-gallon can of sour cream for churning, contending that the charge discriminated against the small shipper. He said that under the proposal, the present rates of 13, 16 and 18 cents on 5, 8 and 10 gallon cans moving 1 to 25 miles would be increased 76.9, 62.5 and 55.5 per cent respectively, while on rates of 35, 45 and 50 cents for distances from 461 to 475 miles the increase would amount to 28.5, 22.2 and 20 per cent respectively. This shipper of one 5-gallon can, he said, will pay the same amount as the shipper of one or more 10-gallon cans. He also pointed out that the application of an emergency charge upsets the relationship of rates on 5, 8 and 10-gallon cans which the commission has established at 70, 90 and 100 respectively.

L. F. Orr, general traffic manager of the Pet Milk Company, was not opposed to an increase but objected to the application of 10 cents on milk and cream, which has less value than does sour cream for churning. He asked that consideration be given each commodity.

Henry D. Pollard Dies Suddenly at Age of 69

Headed Central of Georgia
since 1931 as president,
receiver and co-trustee



Henry Douglas Pollard

HENRY DOUGLAS POLLARD, co-trustee of the Central of Georgia and operating head of the road, died at his home in Savannah, Ga., at 6 p. m. on January 7, at the age of 69. He had spent most of the day at his office and left for home at his usual time. Only chest pains suffered early in the day gave intimation of the heart attack which was to take his life. The funeral was held in Savannah and burial in Baltimore, Md.

Mr. Pollard was well-known in his home city. According to the "Atlanta Constitution," he was "a leader in Savannah, always active in movements for the benefit of that city." Among his many civic interests was 200-year-old Bethesada, the first home for orphan children established in the United States, which Mr. Pollard administered as president of the Union Society during the past five years. The day he died he remarked to an associate that he would stop that evening at a mission maintained by his church "to see how things are getting on."

On the occasion of his 67th birthday on October 4, 1939, some 500 employees, colleagues and friends honored him at a dinner sponsored by the Employees' Club at Savannah. The dinner was a symbol of his relations with the railroad staff. Of him, an associate writes: "As to Mr. Pollard's personal characteristics, I find it a little hard to single out anything in particular. There is no question that he has left a very definite imprint upon the Central of Georgia because of his administration. He was an extremely hard worker and did not spare himself. He took his responsibilities very seriously both to the railroad and to the various charitable and philanthropic activities for which he was so frequently drafted or for which he volunteered. I never knew a more honest or sincere person or one more vigorous or courageous in standing up for what he thought was right. At the same time, he did not ask or want

any 'yes man' attitude from his subordinates. Even the most lowly laborer could see him by merely coming to his office or stopping him on some of his frequent inspection trips and that employee could get his attention and an honest decision. He was intensely wrapped up in his own work and we all believe that he would have preferred to die with his boots on than any other way. To me it was this approachableness and his intense desire to do what he thought was the fair thing that were probably outstanding among his personal characteristics."

Mr. Pollard has headed the Central of Georgia and affiliated short lines since he assumed the presidency in June, 1931. Since then his title has changed twice—to receiver in December, 1932, and to trustee in August, 1940—but his status as chief executive officer of the property has remained unchanged. Of the 16 men who have headed the C. of G. during its 106-year life span, only two—R. R. Cuyler and W. M. Wadley—have served as top-rank officers for a longer period. His predecessors in office include the late C. H. Markham (1911-1914) and L. A. Downs (1925), both later presidents of the Illinois Central, and John J. Pelley, now president, Association of American Railroads. His immediate predecessor was Albert E. Clift.

Mr. Pollard spent virtually all of his railroad career on the C. of G. and since 1898 served on its staff without interruption, except for a three year "recess" in Brazil. (Of this experience, Mr. Pollard spoke little, and left the impression that it was very hard work). By education Mr. Pollard was fitted for the roadway engineering department of railroading and served the early years of his career with the Baltimore & Ohio and the C. of G. in that branch of service. It was while he was general manager of the road that extensive roadway improvements were undertaken to make the C. of G. a

(Continued on page 218)

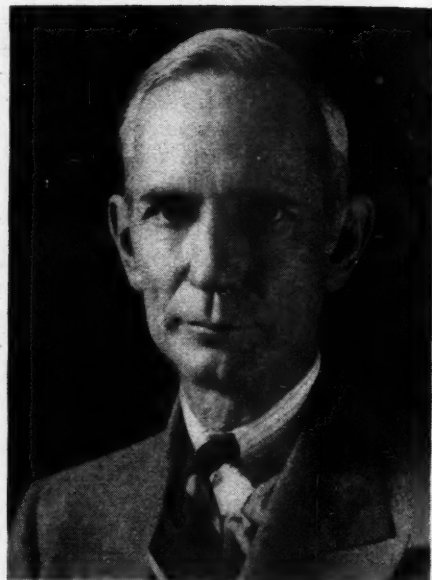


Left: G. Lloyd Wilson.

Right: Charles D. Young.

Top Row (Left to Right): Victor V. Boatner; John L. Rogers; John R. Turney.

Bottom Row: Otto S. Beyer; Joseph L. White; Jack G. Scott.



Eastman Is Getting Organized

ODT director makes several appointments to staff; will not interfere with transport agencies "where interference is unnecessary"

WASHINGTON, D. C.

MAKING his first public appearance in the role of director of the Office of Defense Transportation at a January 8 press conference, Joseph B. Eastman reflected a disposition to do whatever is necessary to discharge his "heavy duties and responsibilities," but he "shall try not to duplicate work which is being done effectively, nor to interfere where interference is unnecessary." At the same time Mr. Eastman announced the first appointments to his staff, naming Victor V. Boatner, former president of the Chicago Great Western, as head of the Division of Railway Transport; Interstate Commerce Commissioner John L. Rogers as head of the Division of Motor Transport; John R. Turney, former St. Louis Southwestern vice-president in charge of law and traffic, as head of the Division of Traffic Movement; G. Lloyd Wilson, professor of transportation and public utilities at the University of Pennsylvania, as head of the Division of Rates; and Otto S. Beyer, member of the National Mediation Board, as head of the Division of Transport Personnel.

A few days later, on January 14, Mr. Eastman announced the appointment of Colonel Charles D. Young, Pennsylvania vice-president in charge of real estate, purchases, and insurance, as head of the Section of Materials and Equipment; Leo M. Nicholson, Chicago real estate and warehouse operator, as head of the Division of Storage; and Guy A. Richardson, former president of the Chicago Surface Lines and receiver for the Chicago Railways Company, as head of the Division of Local Transport. The ODT director explained that he had called the organization which Colonel Young is to head "a section, instead of a division, because it will supply the staff work on materials and equipment for my carrier divisions, but Colonel Young will report directly to me." And he will "associate with himself in this work men who are well informed by training and experience with forms of transportation other than railroads."

In addition to these division heads, Mr. Eastman has appointed Joseph L. White, consultant on transportation problems, executive assistant; Jack G. Scott, chief of the Legal and Enforcement Section of the I. C. C. Bureau of Motor Carriers, general counsel; Fayette B. Dow, assistant on pipe lines, tankers, tank cars, and tank trucks; and A. T. Wood, assistant on Great Lakes Carriers. Also, Mr. Eastman revealed that Mr. Turney has drafted Henry F. McCarthy, passenger traffic manager of the Boston & Maine, to be an assistant in the Division of Traffic Movement. Many of these men served with Mr. Eastman when he was Federal Coordinator of Transportation, the co-ordinator staff "alumni" being Messrs. Boatner, Rogers, Turney, Beyer, and White.

Had Hoped Budd Would Head Rail Division

As he said at the time of his appointment, Mr. Eastman again told how he had hoped that Ralph Budd, former commissioner of transportation of the Advisory Commission to the Council of National Defense, would join his staff. "It was my hope," said the ODT direc-

tor's prepared statement, "that Ralph Budd . . . would be willing to head my Division of Railway Transport, for I believe no man in the country to be better qualified. For a long time, however, Mr. Budd has wished to return to the Chicago, Burlington & Quincy, of which he is president, and to my great regret he has decided that there he can now serve his country best in the present emergency; but I shall, I know, have the benefit of his constant aid and advice." Mr. Eastman told those attending his press conference that he wanted to emphasize particularly the foregoing; because "I mean every word." He added that Mr. Budd is a man "for whose public spirit, character, and ability I have high regard, and I wish he could be with me. He has made his decision after giving the matter most impartial consideration."

The men named to his staff, Mr. Eastman's statement said, were selected "with the approval of the President." The executive order creating ODT requires the director to obtain Presidential approval for the appointment of division heads. Also, the order specifically required the establishment of the aforementioned divisions of railway transport and motor transport; and two others—a Division of Inland Waterway Transport, and a Division of Coastwise and Intercoastal Transport. In addition to these and the already-established divisions of traffic movement rates and transport personnel, Mr. Eastman plans to set up a Division of Statistics, a Division of Storage, and probably "one or two other divisions." Also, there will probably be an assistant for air carriers.

Will Make "Full Use of Collaboration and Cooperation"

Aside from these indications as to the further development of his organization and the aforementioned tribute to Ralph Budd, Mr. Eastman's formal statement had this to say: "The purpose of the Office of Defense Transportation is to lend and aid the authority of the government to the maintenance and development of transportation services which will effectively and efficiently meet the needs of the country in its war effort. The executive order creating the office imposes heavy duties and responsibilities upon the Director. My intent is to lay out an organization so planned and officered that it will be capable of whatever expansion proves to be necessary for the proper discharge of these duties and responsibilities. I shall endeavor, however, to make full use of the collaboration and cooperation of other departments and agencies of the government and of private transportation groups, as the executive order contemplates, and I have every confidence that I shall receive whole-hearted cooperation from these sources."

"I shall try not to duplicate work which is being done effectively, nor to interfere where interference is unnecessary. Thus far, since the beginning of the defense emergency, the transportation systems of the country have functioned admirably, with equally admirable cooperation and help from both the public and private shippers. Difficult problems lie ahead for them, but I am sure that they are prepared to deal courageously,

ably, and effectively with these problems, and I shall do everything in my power to help them."

Opening the conference, Mr. Eastman described his feelings as being like those of a boy "thrown into the water and told to swim." He is undertaking to get going, and later on he hopes to "swim faster." He has had "every evidence" that all interested government and private agencies are in a frame of mind to give him full cooperation; he expects to "draw heavily upon their resources, and draft their personnel." It was in giving an example of the latter that Mr. Eastman told of Mr. Turney's appointment of Passenger Traffic Manager McCarthy of the Boston & Maine to be an assistant in the Division of Traffic Movement.

Also, the ODT director emphasized the cooperation which the transportation agencies have been receiving from shippers. Without it, he said, the carriers, "especially the railroads," could not have functioned in the "really remarkable way" in which they have functioned. He explained how cars have been kept in circulation and the railroads are handling with less equipment, nearly as many carloads as in 1929; while as measured by ton-miles they are handling "a record traffic."

Sees Danger in Material Shortages

Elaborating on his reference to the "difficult problems" ahead, Mr. Eastman said that the greatest danger he now foresees is that the carriers may not be able to get materials for new equipment and repairs. That "looms up as a special danger to the automotive branch of the industry," although "it applies to all." As Mr. Eastman sees it, the materials situation "may lead to a serious depletion of transportation resources." He fears that there may be a tendency not to realize that "commercial and civil transportation is an integral part of the defense mechanism." Efficient transportation, he insisted, "is just as important to war production as machine tools; if transportation should bog down, that would be reflected immediately in the war effort." In other words, as the ODT director also put it, "everyone plays a part in wars today, and transportation is a vital part of the whole fabric of the nation."

Further questioning of Mr. Eastman brought from him a repetition of his aforementioned statement that he doesn't intend to interfere "where interference is unnecessary." He has no plans now to require the pooling of passenger operations or the canceling of certain passenger services; although that "whole question is embraced in the terms of the order" creating ODT. Next came a question as to plans to divert highway traffic to railroads, thus freeing trucks for military purposes. Mr. Eastman did not know what may be necessary along those lines. He went on to mention the plan for the establishment of truck dispatching offices in the West which had been worked out by Commissioner Rogers in his role as chairman of the Central Motor Transportation Committee set up by former Defense Transportation Commissioner Budd. The dispatching-office plan provides a system whereby the army may call upon one central authority to furnish all non-military motor transportation service which may be required.

Hopes Transport Priorities Won't Be Necessary

Noting that he was thinking particularly about the truck situation when he spoke of threatened material shortages, Mr. Eastman stated it to be his understanding that there would be no production of trucks for commercial use after March. As to freight car needs, Mr. Eastman said that was a matter into which Mr. Budd

had gone "with great care," and presented estimates. Meanwhile, as noted in the *Railway Age* of January 10, page 172, the Supply Priorities and Allocations Board has asked Mr. Eastman to present a report "on materials which the entire transportation industry will need in the last nine months of 1942 after all possible conservation measures have been taken." That request came along with SPAB's action authorizing the Office of Production Management to grant priorities for the continued construction up to May 1 of 926 locomotives and 36,000 freight cars in addition to the 9,000 cars which are expected to be built this month. Meanwhile, Mr. Eastman hopes that the time won't come when transportation priorities will be necessary. In that connection he anticipates that war production will be offset to some extent by the curtailment of civilian production.

With respect to the organization created by the aforementioned appointments, the ODT director said there is "nothing flexible or inflexible about it"; it is "a beginning." Asked if Commissioner Rogers and Mediation Board Member Beyer would be with him on a full-time basis, Mr. Eastman said that he expected they would. He anticipated that they would meantime retain their present positions, with the I. C. C. in the case of Mr. Rogers and N. M. B. in the case of Mr. Beyer relieving them of usual duties, much like the commission did in the case of Mr. Eastman himself.

May Modify Unions' Working Rules

The Division of Transportation Personnel, Mr. Eastman said, will not get into employer-employee disputes for which there is existing mediation machinery. He explained, by way of example, that the division might get into such matters as the necessity for seeing that railroad operations are not impaired by the loss of employees drafted for military service; the working out with labor of agreements for the pooling of certain operations, and perhaps for the relaxing of some of working rules to meet emergency situations. Mr. Eastman would not elaborate on the latter. The Division of Rates, he explained, will represent the defense interest of the government in rate matters. Professor Wilson, who will head that division, comes to ODT from the Office of Price Administration, where he has been director of the Transportation Division; and Mr. Eastman said that OPA's rate functions will be transferred to his office.

Responding to a specific question on the matter, Mr. Eastman said that he had not gone into the petroleum-transportation situation; but he doesn't think there is going to be any conflict on that between Petroleum Coordinator Ickes and himself. Other questioning of the ODT director related to the strike on the Toledo, Peoria & Western; and Mr. Eastman made public telegrams which had passed between him and T. P. & W. President George P. McNear, Jr. The latest of the wires was one wherein Mr. Eastman told Mr. McNear that he (Mr. Eastman) remained unpersuaded that the issues in the strike should not be arbitrated.

Careers of V. V. Boatner and John L. Rogers

Victor V. Boatner, whom Mr. Eastman has chosen to head his Division of Railway Transport, was born at Bethlehem, Miss., on May 6, 1881. He was educated in the public schools of that state, at Mississippi College and Bowling Green Business University, entering railway service as a station helper on the Yazoo & Mississippi Valley in 1901. He served with that road in various operating-department positions until 1907

when he became a trainmaster, serving in that capacity on different divisions of the Y. & M. V. and Illinois Central until 1916. In that year Mr. Boatner became superintendent of the I. C.'s New Orleans division, and in 1917 he was transferred to the Memphis division. Four years later, in 1921, he was elected president of the Peoria & Pekin Union, a position which he retained until his election to the presidency of the Chicago Great Western in 1929. Mr. Boatner remained with the C. G. W. until 1931, and in 1932 he became a director and special representative of the Gulf, Mobile & Northern (now Gulf, Mobile & Ohio). During his previous service with Mr. Eastman he was regional director for the Federal Co-ordinator of Transportation in 1933-34, and in 1934-36 he was director of regional co-ordination. Since 1936, Mr. Boatner has been a representative, director and member of the executive committee of the G. M. & O. and its predecessor, the G. M. & N. Also, the ODT announcement said, he "has been engaged for years in transportation consultation and railroad reorganizations."

John L. Rogers, head of the Division of Motor Transport, was born at Knoxville, Tenn., June 27, 1889. He was educated at the University of Tennessee where he received a B. S. degree in mechanical engineering; and at National University, Washington, D. C., where he was awarded an LL.B. Mr. Rogers entered railway service with the Southern at Knoxville, serving successively as laborer, boilermaker apprentice, boilermaker, and layer-out. Subsequently he was employed by the Isthmian Canal Commission, Panama, and he entered the service of the Interstate Commerce Commission in 1917 as a junior mechanical engineer, in the Bureau of Locomotive Inspection. He next served in turn as mechanical engineer and special examiner until 1933 when he became associated with Mr. Eastman as executive assistant to the Federal Co-ordinator of Transportation. In 1935 Mr. Rogers became the first director of the I. C. C.'s Bureau of Motor Carriers, and he has been a member of the commission since 1937.

J. R. Turney and G. Lloyd Wilson

John R. Turney, head of the Division of Traffic Movement, was born on July 4, 1887, in Nashville, Tenn., and he received his LL.B. degree from Vanderbilt University in 1908. From that time until 1917 he was engaged in the general practice of law, and from 1917 until 1933 he was associated with the St. Louis Southwestern, serving that road successively as assistant general solicitor, general solicitor, and vice-president—law and traffic. In 1933 Mr. Turney joined Mr. Eastman's co-ordinator staff as director of the Section of Transportation Service, and he remained in that position until 1935 when he entered the general practice of law in Washington, D. C. As director of the co-ordinator's Section of Transportation Service, Mr. Turney authored the Merchandise Traffic Report, the Passenger Traffic Report, the Freight Traffic Report, and the Railway Traffic Organization Report.

G. Lloyd Wilson, head of the Division of Rates, was born at Philadelphia, Pa., July 10, 1896. He was educated at Swarthmore College, where he received an A. B. degree in 1918; and at the University of Pennsylvania and Temple University, receiving from the former an M.A. degree in 1924, a Ph.D. in 1925, and an M.B.A. in 1926. At Temple, Dr. Wilson completed graduate work in transportation law in 1929. Meanwhile, he had entered railway service in 1911, working during the summer vacation of that year and those of

1912 to 1915 for the New York & Long Branch, and the West Jersey & Seashore (now Pennsylvania). During the summers of 1916 and 1917, Dr. Wilson was with the Philadelphia Electric Company; and upon his graduation from Swarthmore in 1918 he became traffic manager of the Chester Shipbuilding Company, Ltd., and the Merchants Shipbuilding Corporation. Thereafter until 1922 he served in turn as commercial agent for the Southern Steamship Company, research director for the National Freight & Delivery Company, and lecturer at Temple. In 1922 Dr. Wilson joined the faculty of the University of Pennsylvania where he has since remained, serving successively as instructor in transportation, assistant professor and professor. He is also director of the University's Bureau of Public Affairs; and he was a consultant to Mr. Eastman when the latter was co-ordinator. At the time of his appointment to the present Eastman staff he was serving as director of the Transportation Division of the Office of Price Administration. Dr. Wilson is the author of a number of books dealing with transportation, traffic and public utilities problems.

Otto S. Beyer and Charles D. Young

Otto S. Beyer, head of the Division of Transport Personnel, was born on September 18, 1886, at Woodridge, N. J., and he was graduated from the Stevens Institute of Technology in 1907 with an M.E. degree. Also, Mr. Beyer did graduate work at New York University and the University of Pennsylvania. He began his career in 1907 as an engineering apprentice with the Midvale Steel Company, Philadelphia, Pa., and during 1908-09 he was a special apprentice on the Erie. In 1909 Mr. Beyer became engineering assistant in the office of the Erie's general superintendent of motive power, a position which he retained until 1912 when he went to the Chicago, Rock Island & Pacific as assistant to the chief of its maintenance of equipment department. From July, 1913, until January, 1916, he was general foreman at the Rock Island's Horton, Kans., shops; and during 1916-17 he was in charge of the railroad testing laboratories and test facilities at the University of Illinois. During World War I, Mr. Beyer was a captain in the United States Army, and in 1920 he entered practice as a consulting engineer on matters relating to railroad labor and management cooperation. He remained in that work until his 1933 appointment as director of the co-ordinator's Section of Labor Relations. In November, 1935, Mr. Beyer was appointed to the National Mediation Board membership which he still holds.

The Section of Materials and Equipment which Colonel Charles D. Young will head, Mr. Eastman's January 14 announcement said, was created because of the direction of the President that ODT "stimulate the provision of necessary additional transport facilities and equipment in order to achieve the level of domestic transportation service required; and in this connection advise the Supply Priorities and Allocation Board [about to be superseded by the War Production Board] as to the estimated requirements and recommend allocations of materials and equipment necessary for the provision of adequate domestic transportation service." The ODT director added that "the importance of this duty to the transportation system, in view of the tremendous demands which the war effort is making on materials of all kinds, is obvious." And while, as noted above, Colonel Young's section does the staff work in that connection, Mr. Eastman "shall place responsibility on each of the carrier divisions, so far as the type of transportation

with which it deals is concerned to assist me in determining what recommendations shall be made to SPAB."

Colonel Young was born in Washington, D. C., on May 19, 1878, and was educated in the public schools of that city and Cornell University, where he received an M. E. degree in 1902. He entered railroad service in 1900 as a special apprentice with one of the present constituent companies of the Pennsylvania, and he has since remained with the P. R. R. He served in various mechanical department positions until January, 1919, when he entered the operating department as superintendent of the Schuylkill division. A little over a year later, in March, 1920, Colonel Young transferred to the stores department, becoming general supervisor of stores for the P. R. R. system. He remained in that position until January, 1924, when he was appointed stores manager. In January, 1927, he was appointed general purchasing agent, P. R. R. system, and in November, 1930, he was appointed assistant vice-president, purchases, stores and insurance. He was promoted to vice-president, purchases, stores and insurance, in April, 1932; and he has been vice-president, real estate, purchases, and insurance since September, 1938. Colonel Young was a gunner's mate in the United States Navy during the Spanish-American War; he served during World War I as Lieutenant Colonel, Transportation Corps, A. E. F., and he is now a colonel, Engineers Reserve, U. S. Army.

Joseph L. White

Joseph L. White, Mr. Eastman's executive assistant, was born on September 2, 1884, at Ithaca, N. Y. He was educated in Ithaca's public schools, at Cornell University, which he attended for one year, and at Harvard University, where he received his A.B. degree in 1906. Mr. White entered railroad service in 1906, and from then until 1914 he served with the Grand Trunk and the Wabash in various positions in the engineering, operating, purchasing, and executive departments. During 1914-15 he was assistant to the president of the Chicago, Indianapolis & Louisville; and during 1915-17 he was operating statistician for the Union Pacific. In 1917 Mr. White became chief clerk to the Priorities Commission of the War Industries Board; and in the following year he joined the United States Railroad Administration as assistant manager of the Operating Statistics Section. He remained with U. S. R. A. until 1922, meanwhile serving as statistician to the director general and assistant comptroller. During 1922-23 Mr. White was statistician for the Joint New England Railroad Committee, and from 1923 until 1925 he was an accountant on the staff of the comptroller of the Allied Chemical & Dye Corporation. Since 1925 he has been vice-president of Investment Managers Company; assistant vice-president of the Irving Trust Company; assistant to director, Division of Transportation Loans, Federal Emergency Administration of Public Works; and co-director of the co-ordinator's Section of Transportation Service. Also, he has worked as a transportation consultant; a consultant on the National Resources Planning Board's transport study; and he served recently as assistant director of OPA's Transportation Division, which, as noted above, was headed by Dr. Wilson.

Jack G. Scott and Henry F. McCarthy

Jack G. Scott, whom Mr. Eastman has named as general counsel of ODT, was born at Oberlin, Kans.,

September 28, 1895. He was educated in the public schools of Colorado; at the University of Colorado where he was awarded an A.B. in 1917; and the University of Denver where he received his LL.B. in 1921. Meanwhile, Mr. Scott had served in the United States Navy from 1917 until 1919. After completing his law course, he practiced in Denver until 1933, becoming a specialist in law relating to motor vehicle regulation. He participated in the drafting of the Colorado motor vehicle carrier acts of 1927 and 1931. In 1933 Mr. Scott was appointed attorney on public utility codes in the Legal Division of the National Recovery Administration, and thereafter he became in turn the NRA's division counsel, managing attorney, associate counsel and acting general counsel. Since October 1, 1935, he has been chief attorney, Section of Law Enforcement, Bureau of Motor Carriers, I. C. C.

Henry F. McCarthy, whom Mr. Turney has appointed assistant in the Division of Traffic Movement, was born May 11, 1906, at Portsmouth, N. H. He was educated in the Portsmouth public schools and at Harvard, where he received a B.S. degree in 1927. Also he was awarded an M.S. in transportation by Yale, where he did graduate work in 1929-30. Mr. McCarthy entered railroad service in 1927 in the engineering department of the Baltimore & Ohio and remained in that position until 1929. During 1930-32 he held various positions in the traffic department of the St. Louis Southwestern, and from 1932 until 1934 he served in turn as assistant to the traffic vice-president and assistant general traffic manager of that road. In 1934 Mr. McCarthy became associated with the Boston & Maine and Maine Central as general passenger agent; and he has been passenger traffic manager of those roads and of the Boston-Maine Airways since 1936.

H. D. Pollard Dies Suddenly

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thoroughly modern railroad. Between 1924 and 1926 grades were revised and alignment changed between Columbus, Ga., and Birmingham, Ala., which project involved the construction of 56 mi. of new line and raising or lowering the grade of 27 mi. of main line alone; the building of new yards and an increase of 13 mi. in passing and storage track mileage. It was during his general managership, too, in 1925 that the road abandoned operation of its own sleeping cars and retired its entire fleet of 19 sleepers and 5 parlor cars.

As a road which depended on products of agriculture for a large part of its revenues, the C. of G. suffered early and hard from motor truck competition, which came to the farms and plantations of the country before it came to its industries. And for this reason the road suffered exceptional reverses when the depression lowered the general business level because the trucks had already taken a large part of its normal traffic. Recognizing this threat, Mr. Pollard organized the Central of Georgia Motor Transport Company as early as 1927, and directed the substitution of buses and trucks for branch-line services in some cases and co-ordination with railroad service in others. This affiliate designed an unusual combination truck-bus for use in areas of exceptionally light traffic.

Passenger traffic suffered most during the depression. In 1931, passenger-miles decreased 33 per cent over the preceding year alone, as compared with an 18 per cent drop in freight ton-miles. In an effort to win back

passenger travel with the capital outlay a bankrupt railroad could afford, Mr. Pollard placed in service a number of company-owned, air-conditioned lounge and lounge-buffet cars built in C. of G. shops. This service improvement broke the skid; passenger traffic climbed up from the bottom of the trough with an increase of 7 per cent in 1935 over 1934.

Control of the Central of Georgia was purchased by E. H. Harriman interests in 1909 and immediately improvement of its physical property to so-called "Harriman Group" standards was undertaken, so as to make it part of a through mid-west to Atlantic coast line by connection with the Illinois Central at Birmingham. In this transformation its status as a local line was ended. The Illinois Central has controlled it ever since by ownership of all the road's capital stock and many of the C. of G. officers in the past have come from the I. C. Mr. Pollard, indeed, is the exception in having started his career with the C. of G. and remained there.

Henry Douglas Pollard was born on October 4, 1872, at Aylett, Va. He was educated at the Aberdeen (Va.) Academy, also taking a summer course at the University of Virginia and a night course at Drexel Institute, Philadelphia, Pa. He began his railroad career in 1892 as rodman on the Baltimore & Ohio, going with the Ohio Southern (now part of Detroit, Toledo & Ironton) in February, 1893, as resident engineer at Wellston, Ohio, where he remained until June of the same year. From the latter date until 1894, Mr. Pollard was employed on the topographical survey of the city of Baltimore, then returning to railroad work as assistant engineer, maintenance of way, of the Philadelphia division of the B. & O., which position he held until May, 1898, when he entered the service of the Central of Georgia as transitman in the engineering department at Savannah. He subsequently served consecutively to January, 1911, as assistant engineer, resident engineer, supervisor of track, trainmaster, roadmaster and superintendent for that road.

In 1911 Mr. Pollard went to Brazil, serving from February to June of that year as inspector general of the Sorocabana railway at Sao Paulo, and from June, 1911, to August, 1913, as inspector general of the Auxiliare railway at Santa Maria and Porte Allegre. He returned to America in 1913, re-entering the service of the Central of Georgia as valuation engineer, in which capacity he served until 1915, when he was elected president of the Wrightsville & Tennille Railroad, one of the short line railroads affiliated with the Central of Georgia. He became assistant general manager of the Central of Georgia in February, 1918, being promoted to general manager in June of the same year. He was appointed general superintendent of the road in March, 1920, and in January, 1924, was again appointed general manager. Mr. Pollard was appointed vice-president and general manager in October, 1925, and became president and general manager on June 18, 1931.

Hard times hit the C. of G. in 1932. During that year it borrowed \$1,692,681 from the Railroad Credit Corporation and \$2,917,632 from the Reconstruction Finance Corporation to pay 1931 taxes and other debts. Still unable to earn its keep and having exhausted its ability to borrow further, the railroad assented to a "friendly" receivership and Mr. Pollard was appointed receiver on December 19, 1932. On June 19, 1940, the property was transferred from equity receivership proceedings to reorganization under Section 77, with Mr. Pollard as trustee and active operating head of the road.

Mr. Pollard has also been a director of the road since 1930 and president of the Ocean Steamship Company of Savannah, a wholly-owned subsidiary, since December, 1940.

Universal Brake Beam Safety Support

A BRAKE beam safety support, designed to be applicable to any type of freight car truck and give positive assurance against dropping of the brake beams under any conditions of brake hanger or brake head failure, has recently been developed by the Grip Nut Company, Chicago. This new support, known as



Universal Brake Beam Safety Support Applied to a Conventional Freight Car Truck—The Cables Are Attached to the Tension Rod and Just Clear the Bolster

the Universal brake beam safety support, has been thoroughly tested at the Armour Institute of Technology laboratories, the cable failing at a load of 17,170 lb., which indicates a high factor of safety based on a maximum tangential load of approximately 1,500 lb. on the brake hanger. This particular type of safety support has been approved by the A. A. R., Mechanical division, as an acceptable equivalent for use on cars in interchange service.

The new brake beam safety support consists simply of a short length of ½-in. double-galvanized cable (two per truck), connected by means of a special malleable-iron fitting on each end to the tension members of the two brake beams and extending up to and over the

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A Steel Guard Extends Under the Compression Member

Rate Case Closes at St. Louis

Railroads base petition on increased wages and other added expenses—Opposition denies need for 10 per cent raise

AS reported in the *Railway Age* of last week, the Interstate Commerce Commission opened its hearing on the petition of the railroads for a 10 per cent increase in rates, fares and charges, Ex Parte 148, at St. Louis, Mo., on Monday, January 5. The railroads completed their testimony on the first morning and supporters of the petition finished theirs at a night session on the same day. The next three days were consumed by opponents. Generally speaking, they did not object to a general rate increase but to increased rates on certain commodities.

State commissions and agricultural interests, including the Department of Agriculture, opposed increasing rates on farm products, contending that the income and financial condition of the farmer cannot stand higher freight rates. Shippers of products of mines were opposed to higher rates on their commodities. C. A. Butler, general traffic manager for the Anaconda Copper Mining Company, testified that the non-ferrous metal interests are opposed because the rate on non-ferrous metals is reasonable, now that higher wages, operating costs and taxes have been absorbed by the industry and that prices on copper, lead and zinc have been fixed by the Office of Price Administration. Cement, sand and gravel, iron ore, petroleum, lumber and miscellaneous interests also testified in opposition. Coal and coke shippers and receivers objected strenuously to a movement of the line dividing the eastern and western territories.

Oral Arguments

Oral arguments were heard by six members of the Interstate Commerce Commission on January 12 to 14. The members included Acting Chairman Clyde B. Aitchison and Commissioners Charles D. Mahaffie, Walter M. W. Splawn, Claude R. Porter, William E. Lee and William J. Patterson.

Any increase in rates, fares, and charges is reasonable if the net income resulting does not exceed a fair return on investment, Judge R. V. Fletcher, vice-president of the Association of American Railroads, argued on behalf of the Class I railroads. In spite of political theories, he said, the railroads still have the right to earn a fair return. Based upon the past and present, there need be no fear that the increase sought will yield more than a fair return, he asserted. The rate of return on property investment for the year ending October 31, 1941, was only 3.8 per cent, while on the Commission's valuation of \$19,972,000,000 made in Ex Parte 123, plus additions and betterments, it was only 5.02 per cent for the same year and if the next 10 years are the same as 1941, it will not be more than 5 per cent. He contended that as war efforts go up, civilian production will go down, thus keeping railway revenues stationary or causing them to decline. Income increases which have occurred in recent months, he said, have been checked, as is evidenced by the net railway operating income for November, 1941, which was 3.9 per cent less than it was in November, 1940.

Judge Fletcher based his argument for increased rates,

fares and charges upon increased costs, particularly higher wages which the railroads are paying as a result of the recent award made by the President's Emergency Board. He contended that the railroads would have been decidedly unpatriotic if they had not yielded to the Emergency Board and averted a strike. The Board, he continued, realized that the railroads would ask for an increase in rates and made its award on the theory that the added wage expense would be met by increased rates.

A total of 312 million dollars, he said, represents the wage increase given to employees by the Emergency Board but adjustments that have been made in the wages of employees not covered by the Board's award add another 20 million dollars. If the business of 1942 calls for a larger number of employees, these amounts will be still greater, he said.

Rising prices of materials and the added cost of protecting railroad property during the war were also cited by Judge Fletcher in his argument. The cost of material, he said, has risen 9.8 per cent in 1941 and will probably be higher in the future. The cost of protecting railroad property from sabotage, he said, might run as high as 70 million dollars but if part of the work is done by the government, as has been suggested, the added expense to the railroads will be about 30 million dollars a year. Special services incident to the war, the amount of which can not be estimated, will also contribute to expenses.

The revenue needed by the railroads, he said, must be sufficient to provide additional equipment to handle increased traffic. A total of 144,000 cars and 800 locomotives which will cost 600 million dollars, he said, must be financed with a down payment of 120 million dollars and interest amounting to 150 million dollars a year.

Judge Fletcher contended that Ex Parte 148 is a revenue and not a rate case and supported this position by citing previous actions taken by the Commission. He also asserted that a percentage increase has always been used by the carriers in revenue cases and that if specific increases on commodities had been asked for, oral arguments would be made on January 12, 1943, instead of on January 12, 1942.

Judge Fletcher also referred to price fixing, especially to the government's recent attitude toward farm prices, saying that it would be nice if the railroads could enjoy rates fixed at 10 per cent above parity or no lower than those of the most prosperous period in their history.

C. A. Miller, vice-president and general counsel of the American Short Line Railroad Association, adopted the argument and statement of Judge Fletcher for Class 2 and 3 railroads, switching and terminal companies and electric lines. In addition, he pointed out that these companies have no backlog with which to meet increasing expenses, or give the type of service which the public expects and has a right to receive.

Douglas Smith, attorney for the Security Owners Association, argued that unfavorable action by the Commission might penalize the railroads and bring about

consideration of government operation. To refute the contention that an anticipated increase in traffic will produce the needed revenue, he said that during the last war the increased traffic did not cover the added expenses, for the loss under government operation was \$1,200,000,000. He referred to the five largest railroads now in bankruptcy and said that their wage increases are about equal to their entire income for the period from 1931 to 1940. If these railroads do not get a rate increase, he said, they will not only be unable to pay their fixed charges but will have no income at all.

J. S. Burchmore, counsel for the National Industrial Traffic League, argued in favor of an increase for the duration of the emergency. He asked that the petition of the railroads be handled according to the law and the facts presented.

Governmental Bodies State Positions

Haskell Donoho, counsel for the Department of Agriculture, stated that this department believes that a general increase of 10 per cent is not necessary to recompense the petitioners for increased operating costs and that if some increases in freight rates are granted, these increases should not apply to agricultural commodities. He argued that traffic will increase in 1942 and 1943 and that in view of this condition the amount of additional revenue sought is excessive. He also contended that an increase in freight rates on agricultural commodities will be contrary to the public interest in war time.

Mortgaged farms, surplus crops and inability to pass any increase in rates on to the consumer were offered as arguments by state public utility commissions and farm interests in opposition to the railroads' petition. Major opposition to higher rates on agricultural products came from the western and the southeastern states. Growers of potatoes in Idaho and Utah, according to J. G. Bruce, chairman of transportation of the Idaho Public Utilities Commission, had to sell 3,500,000 bushels of potatoes for feed at a low price because of inability of the farmer to market them for table use. In Oregon, Washington and Idaho, he said, 100 million bushels of wheat are in storage and because most of it is covered by federal loans, a large portion will eventually be owned by the government. Any increase in freight rates on agricultural products covered by federal loans, he argued, would intensify the situation and increase government expenses for relief.

H. E. Davidson, commerce counsel of the Iowa State Commerce Commission, contended that the railways' petition is without merit and should be denied. He argued that future traffic will supply more than the needed revenue.

William Williamson, counsel for the South Dakota Public Utilities Commission, argued that rates on agricultural products should not be increased because farming in that state is in a deplorable condition. About 50 per cent of all farm land, he said, is owned by the counties or by corporations as a result of default.

An increase in rates will hurt the railroads, according to N. E. Williams, who represented the Public Service Commission of North Dakota, because traffic will be diverted. He also called attention to the fact that North Dakota farmers had returned live stock and other shipments to the rails and thus contributed to their revenues. A rate increase of 10 per cent on the 120 million bushels of grain produced in this section of the country, he continued, would amount to \$1,844,000, and because it would have to be borne by the grower, would force growers to truck their wheat.

C. B. Bee, special counsel for the Oklahoma Corporation Commission, argued that rates on "class and column numbered" traffic in the southwest should not be increased by such a percentage as will result in increases, on a distance basis, that are higher than the increase made in the Central Freight Association Territory. He also contended that any increase authorized should be for a limited time and be made by means of a supplement which can never be translated into the rate structure. Any increase authorized on grain and grain products, he said, should be on a straight percentage basis, with the preservation of the nearest one half cent in the final rate. Any increase on grain and grain products, he continued, should not be permitted to become effective before March 15, 1942.

C. E. Blaine, representing the American National Live Stock Association, the Texas and Southwestern Cattle Raisers Association, the Live Stock Traffic Association and the National Wool Growers Association, was opposed to any increase on live stock and their products because the increase cannot be passed on to consumers and because these industries cannot fix the prices they receive. He contended that revenues do not always increase when rates are raised.

Coal Interests Object

Coal interests not only objected to an increase but were opposed to the method suggested by the railroads. George Bronz, consumers counsel of the Bituminous Coal Division of the Department of the Interior, argued that coal-carrying railroads can earn more than five per cent on their investment if traffic increases slightly. He did not object to an increase in rates but suggested that the rates on coal moving to the eastern and southern districts remain unchanged and that the dividing line between the eastern and western districts be moved westward from Indiana to a sparsely populated industrial area. He also asked the Commission to fix an expiration date for any increases it might grant.

K. D. Loos, representing the National Coal Association, argued that coal and coke should bear a larger proportion of the burden of transportation than other commodities. At the present time, he said, rates on coal and coke are on the same level as on July 1, 1922, while rates generally are below that level. Because coal and coke are paying their way, he asserted, any increase on their rates should be tempered and the rates on other commodities adjusted accordingly.

C. E. Elmquist, representing the Lake Superior docks and the Wisconsin Coal Commission, contended that an increase in rates on coal would cause more tonnage to be lost to the oil and gas burners. He objected to increased charges for dumping and switching.

J. F. Finerty, attorney for the Glass Container Association, charged that because the railroads had failed to offer an estimate of their future traffic and needs, had not testified as to their net income in 1941, had not indicated what their wages will aggregate in 1942 and had not shown what net income would be produced by the rate increase sought, they had failed to meet the burden of proof. He argued that if traffic in 1942 increased 10 per cent, an increase of 2.8 per cent in the rates on all commodities other than those on coal, coke, iron ore, passengers and milk would produce a net railway operating income of \$1,000,000,000, which the carriers testified before the Emergency Board would be needed to provide for the necessary improvements and additions to structure and equipment and to pay adequate dividends to stockholders. He contended that the carriers are not entitled to earn a fair return during the war

but hoped that the Commission would grant some increase in rates.

J. T. Lawrence, representing independent oil companies in the Mid-Continent territory, argued that the rates on gasoline from this territory should not be increased because the railroads are now charging the full maximum rate prescribed by the Commission while in no instance are they charging the full rate in marine and pipeline territory.

The competitive situation between the western and the southern lumber interests was brought out by W. C. McCulloch, representing interests in the Pacific and Mountain states, and A. G. T. Moore, representing the Southern Pine Association.

Railroads Make Closing Arguments

Closing arguments for the railroads were made on Wednesday afternoon by J. M. Souby, assistant general counsel of the Association of American Railroads, J. P. Plunkett, general attorney of the Great Northern, and Elmer A. Smith, general attorney of the Illinois Central. In their final arguments they refuted certain claims, assertions and assumptions made in arguments against the increase.

Mr. Souby directed his remarks primarily towards the agricultural situation. With a few exceptions, he said, the opposition that has appeared has been more toward particular measures and methods of the proposed increase rather than toward an increase as such. The outstanding opposition, he continued, has come from agricultural, including live stock, interests and those who choose to champion the cause of agriculture, such as state commissions and the Department of Agriculture. Others, who have opposed the increase, are iron ore interests, independent refiners who by no means represent the petroleum industry of the country, those who have tried to change the case from revenue to rate, those who object to any increase on fundamental grounds and the non-ferrous interests that come under the influence of the O. P. A.

To show the relative importance of the revenue from agriculture, he said that in 1940 it represented about 20 per cent of the total gross revenue of all carriers and 30 per cent of the gross revenues of the western lines. Of the cars originating, 16.7 per cent of all and 30.2 per cent of the western cars came from agriculture. Exemption of traffic of that importance, he said, would result in such a curtailment of the revenues of western lines that they would have to make it up on other traffic.

Those who urge exemption, he asserted, do so because they enjoy championing agriculture and do not like to see the practice stopped. One of the arguments for exemption is great distance from market but if there is any traffic which needs an increase it is the long distance traffic which has had a greater increase in expense.

It has been argued that because of the great suffering by agriculture it cannot stand the cost, he continued. This condition has nothing to do with the railroads and the question is: Do the railroads have the right to ask payment for their service? Agriculture has recuperated its losses through subsidies and improved markets and the railroads are now trying to recuperate by means of a rate increase. Agriculture, he concluded, can pay higher rates.

Mr. Plunkett refuted contentions that because iron ore traffic is providing revenue which enables the carriers of this commodity to show fair earnings, the rate on iron ore should not be increased. The rate on iron ore from the Mineral Range to Lake Superior docks, he

pointed out, is the same as it was in 1922 when the Commission found it not unreasonable and it is the only freight rate in the United States that was not increased in Ex Parte 115 or 123. Rates from Wisconsin and Michigan ranges, he said, are somewhat lower than they were in 1922.

If, he continued, a proper increase on iron ore must be denied because the present rate permits a railroad to make more than 5 per cent, a large part of the rate structure is subject to revision because the rates on many commodities do permit a return of more than 5 per cent. However, although the Commission fixed 5¾ per cent as a fair return, it never said that a larger return was unreasonable, he concluded.

Says Southern Carriers Never Earned More Than 5.27

Mr. Smith argued for the railroads of the Southern Region and refuted the contention of state commissions that in the light of earnings of the last six months, the railroads do not need an increase. In 1940, according to testimony by the opposition, he said, the southern railroads earned 7.05 per cent on the valuation set forth by the Bureau of Statistics and the first 10 months of 1941 also showed a fair return. However, he continued, the return for 1941 should not be based upon the first 10 months because November did not behave as well as the previous months. The net railway operating revenue of the southern carriers, he said, will amount to 139 million dollars instead of 157 million dollars and a return of 6.2 per cent on any basis of valuation is not unreasonable. He showed that these railroads have never earned more than 5.27 per cent and had deficits in several years.

He argued that the return should be commensurate with the use that is being made of the properties. Valuations made recently, he concluded, have depreciated railroad properties but today the railroads still have the facilities for again handling record amounts of traffic and this should be taken into account when fair return is considered.

Universal Brake Beam Safety Support

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bolster with about 1 in. to 1½ in. clearance, where the cable shape is fixed by means of a formed section of ½-in. pipe which encloses it. This safety support does not touch the bolster at any point, but will come into action immediately on the failure of any part of the brake beam or brake-beam hanger. Provisions for supporting the brake beam compression member in case it becomes disengaged from the brake head is afforded by ½-in. by 2-in. steel guards which extend around the compression members and are held rigidly between the malleable fittings and the tension members by U-bolt and Grip Nut connections, as shown in one of the close-up views. The cable is anchored in the malleable fittings by expanding the wires at each end and filling the taper cavities with molten zinc in accordance with customary practice.

Only one design is required on either the conventional or spring-plankless freight-car truck. Additional advantages include the complete elimination of moving parts and consequent wear; all parts are subject to tension only, while function; number of working parts minimized; elimination of spring-plank drilling and unbalanced loading; possibility of removing and replacing brake beams by the removal and replacement of four ½-in. nuts.

NEWS

Still Striking on the T. P. & W.

McNear discerns no efficiency
in hiring 83 men to do
the work of 55

The strike of train and engine service employees on the T. P. & W. entered its third week with prospects of settlement as remote as ever. The issues in the strike are clear-cut and well-defined. The strikers are determined that the T. P. & W. shall install the standard or so-called "featherbed" rules and G. P. McNear, Jr., president of the railway, is equally determined that, while willing to pay wages somewhat higher than the standard rates, the employees must deliver eight hours actual work for eight hours pay. To several suggestions from Washington sources that the controversy be submitted to arbitration in the interests of operating efficiency during the national emergency, Mr. McNear has pointed out that his stand is taken in the interest of operating efficiency. The operating conditions on the T. P. & W. are such that the train movements in typical road service are not sufficient to require a full day's work, and until the strike on December 28, the road employees also did certain other work, such as delivering cuts of cars in interchange to fill out their day's work.

As to operating efficiency during the national emergency, Mr. McNear's contention is that, with manpower an extremely valuable commodity during wartime, it can hardly be called efficient to increase the force from 55 to 83 men, as would be necessary if the employees' contentions were supported, when the job can be done satisfactorily with the smaller force.

Telegrams suggesting arbitration have been received from D. J. Lewis, chairman, National Mediation Board; R. F. Cole, secretary of the same body; J. M. Johnson, commissioner, Interstate Commerce Commission; William S. Knudsen, Office of Production Management, and J. B. Eastman, director, Office of Defense Transportation. To all of these, McNear has replied substantially as follows: "Have wired members National Mediation Board many times urging they recommend to President appointment of emergency board in accordance with provisions Railway Labor Act to investigate and report upon matters involved in dispute." The Washington telegrams have all suggested an arbitration board instead of a President's emergency board. To a suggestion by Mr. Knudsen that a continuance of the strike

may cause danger of the controversy spreading to other railroads, Mr. McNear replies that the dispute is entirely over working rules, and since in the settlement of the recent wage negotiations, the railroads as a whole agreed to let the rules stand as they are for a considerable period, the danger of the strike spreading is remote.

The T. P. & W. has recruited a force to operate its trains on a restricted basis for the present, and, as a result of violence, the T. P. & W. asked for and obtained a restraining order on January 3, seeking to halt the violence. This order, normally effective for only five days, has since been extended for the duration of a hearing now in progress before Judge J. L. Adair in the federal court at Peoria. At this hearing, the T. P. & W. is seeking a permanent injunction against violence by strikers. Meanwhile, the number of pickets at any given point has been limited to three. Even so, the railway alleges that acts of violence continue, and reports an attempt to burn a yard office, several cases of misplaced switches and tampering with signals, and threats to derail the pilot motor cars which are still operated ahead of each train as a precautionary measure. It is expected that the hearing will be concluded and a decision reached as to a permanent injunction by January 19.

Merger of Santa Fe Affiliates

The Interstate Commerce Commission has conditionally authorized a merger into the Santa Fe Trail Transportation Company of the operating rights and property of Santa Fe Trails of Illinois, Inc. The condition stipulates that Santa Fe Trails Transportation Company shall amortize over a 10-year period the amount of the increase in its "Other Intangible Property" account resulting from the transaction. The merger, the commission's report said, will be "in the interest of corporate simplification."

Would Preserve Seniority of Persons in Military Service

Representative Hoffman, Republican of Michigan, has introduced H. R. 6372 "to preserve employment for, and seniority rights of, persons enlisting or inducted into the military services of the United States." The bill covers "all persons . . . who upon such enlistment or induction shall have been gainfully employed in any business, industry, profession, or other enterprise." As noted in the *Railway Age* of January 10, page 172, Senator Wheeler, Democrat of Montana, recently introduced a similar bill (S. 2174) applying only to "employees of carriers."

L. c. l. Service Is Found Below Par

Committee at Atlantic meeting
sees room for a great deal
of improvement

Some 600 members of the Atlantic States Shippers Advisory Board at the 18th annual and 57th regular meeting at Newark, N. J., on January 8, heard discussions of the ability of the carriers to handle the changed character of traffic; proposed changes in car service rules; l. c. l. service performance and the condition of the major Atlantic ports. In announcing an estimate of the commodity committees of an increase in carloadings in Board territory of only 4.6 per cent the first quarter of 1942 over that of 1941, C. J. Goodyear, chairman of the Board, called attention to the fact that (1) the forecast was made before war was declared and (2) the commodity classification of the forecast does not account for a great deal of military traffic. It does not include, for example, tanks, airplanes, airplane parts and non-ferrous metals. Hence it cannot be taken as accurate.

Detailed criticism of merchandise service marked the report of R. C. Huntington, chairman of the Less Carload Transportation committee. In reviewing the two-year existence of the committee, its chairman pointed out that several other boards have adopted the idea and formed such groups of their own. Some time ago, the committee sent questionnaires to Eastern railroads requesting data on l. c. l. service. Not content with merely tabulating the replies—with many of which it disagreed—it sent its comments to operating officers of the carriers and now awaits their counter-comments. The committee, the report read, has succeeded in having 24 to 36 hr. clipped off transit time in its territory and between the Atlantic seaboard and Mississippi river crossings. Among other things, Mr. Huntington noted that the Pennsylvania has altered its entire interchange operation to cut off 24 hr. in connection with New York movements. The committee has campaigned for use of motor trucks at transfer points and compliments the Pennsylvania on its predominate use of highway vehicles to transfer l. c. l. to and from other railroads.

Asserting that less carload traffic is important and its revenue high, Mr. Huntington chided the railroads for maintaining no special department for less-carload traffic, when they have separate dairy, coal

(Continued on page 230)

RRs Should Add To Supervision

Kent Healy says it takes men on the ground to deal with the kind of traffic now moving

The prime objective of the railroads must be to handle abnormal traffic demands today and to help maintain employment and stability tomorrow. Professor Kent T. Healy of Yale University told members of the New England Railroad Club at Boston, Mass., on January 13 that these objectives "call for a humble front to the public and behind the scenes the most careful far-sighted thought that has ever been given to the formulation of railroad policies."

To handle defense traffic successfully, he said, the roads will, among other things, have to disavow any "business as usual" policy; spend money liberally to augment supervisory and executive personnel—since co-ordinators and Washington experts cannot run the trains and switch the cars—and increase, not decrease, statistical studies necessary to control operations. Following the war the railroads' chief problem will be to share with other industries the burden of maintaining employment so that no excuse for government encroachment will exist. This, in Professor Healy's opinion, is principally a question of finding new money or reserves for capital improvements and of a new pricing policy.

Defense demands, according to the speaker, are going to be far less orderly and foreseeable than commercial traffic. "There will be more and more military movements requiring all variety of equipment, unusual terminal handling, as well as special scheduling and needed adherence to those schedules. The railroads will be asked to move increased volumes of defense traffic over unusual routes and between terminals never planned for such operations. Much of this will involve exports to the Far East, Africa and Europe, with all the uncertainty of ship arrivals due to the fact that the enemy roves the high seas. Speed and regularity are of prime importance. The adequate meeting of these increased demands will be the basis for judgment as to whether the railroads can meet the challenge of the emergency. There can be no alibi that the demands are erratic, unpredictable or unreasonable—the demands are that from the start if only because of the very nature of our enemies, their 'blitz' methods and their wide disposition over the surface of the earth.

"As time goes on the railroads will be less and less in a free and ready market for all the men and materials they want. Immediate military needs will come first, other defense industries will be pressing alongside the railroads for men and materials. The railroads will have to operate in an atmosphere of scarcity, but neither can scarcity be given as an alibi for failure to meet defense transportation demands—it will be up to the railroads to develop ingenuity to meet their needs in spite of scarcity."

To do this job, the speaker doubts whether the railroads will be able as well

to take advantage of certain restrictions of their competitors now developing. As a matter of fact the type of traffic which they would take on by competitive practices is the kind which they are no longer equipped to handle. Said he on this point: "Certainly the opportunities to regain traffic from competitors will be especially tempting, with restriction of the latter's operation by priorities or commandeering of their facilities. With the possible reduction of private automobile traffic, the expected return to the rails from rubber may have a pleasing ring in the railroader's ears, but it is almost a certainty that the railroads have not got the facilities to handle very much of such diverted traffic without affecting their ability to do a top notch defense job. Should any great quantity of the short-, or medium-haul, small-lot truck traffic be similarly returned to the rails, the freight houses, terminal tracks, and way freights could be quickly swamped. By way of detailed illustration I might point to the old peddler way freights which stopped at stations every few miles to handle the great volume of l.c.l. freight then carried by the railroads.

"Today many of the stations are closed, in some cases the railroad lines have been abandoned, and certainly the overall improved performance of numerous divisions can be partially attributed to the removal of those way freights. Any considerable resumption of these trains would require crews, motive power, track capacity and station facilities which the railroads do not possess and cannot get. Thus the railroads will have to recognize and make it clear to others that their facilities and operations have been modified in the past 10 or 15 years in light of the new competitive allocations of traffic and that resumption of certain of the older operations is impossible in view of the scarcity of materials and man-power at the present time. From the long-run point of view, too, the taking over of much of the lost traffic would have its dangers. With post-war lifting of such temporary bars as affect competitors in war-time, the railroads would have spent their effort in channels which to a large extent would only have to be rendered useless again."

Pointing out that only the supervisory and executive officers on the property can effectively direct the use of equipment and labor, the speaker asserted that "the most important single policy of the railroads at the moment should be to provide ample official personnel to insure that the direction of their operations is without the slightest shadow of doubt being carried out to the highest degree of perfection."

In his opinion the erratic character and volume of emergency traffic is straining supervisory and executive personnel to "the point where the law of diminishing return sets in." Personnel was shrunk at the start of the war by curtailments, and elimination of divisions and official positions. Too, managements may be inhibited from an aggressive reconstruction of personnel by the fear of retrenchment after the emergency. But, the speaker said, "if every stone is not turned up to meet the present problem there may be no future for private managements to have the privilege of worrying about."

How Study Board Looks at Its Task

Will complete its tax and rate studies on schedule, but needs more time on competition

The Board of Investigation and Research created by the Transportation Act of 1940 expects to have its studies of the extent to which taxes are imposed on carriers and public aids to transport agencies in the hands of the President and Congress by September 18, when the board will die under the provisions of the act unless its life is extended by Presidential proclamation. The "hope" that the tax study would be completed "by next September," and the "expectation" that the public-aids study would be ready "by September 18 next" were expressed by Board Chairman Nelson Lee Smith in a January 13 address before the Southern Governors' Conference at Miami, Fla.

Discussing the work of the board Mr. Smith said much concerning its plans for the carrying out of its third specific assignment—a study of the relative economy and fitness of rail, motor and water carriers; but he did not indicate that it would be completed by the September 18 deadline. Meanwhile the commitment which the board recently made to the Senate committee on appropriations to undertake a study of the interterritorial freight rate structure will be discharged promptly. "It is the board's intention," Mr. Smith told the Southern governors, "to submit this report within a few months so that it may be of maximum immediate usefulness to all concerned."

While the board anticipates that the interterritorial rate study will "clarify the fundamental issues which are inherent in this highly controversial problem," Mr. Smith at the same time asserted that "it must be recognized that the board cannot at this time make in full detail a comprehensive analysis of individual rates and traffic movements." "To attempt to do so," he went on, "would entail demands upon the staffs and finances of the individual carriers which would tax too heavily organizations which must give their utmost effort to the successful prosecution of the war. Furthermore, this might involve duplication of the activities now called for in connection with various proceedings now pending before the Interstate Commerce Commission—a duplication which would be undesirable from every point of view."

Nevertheless, the board is hopeful that it may "make a contribution to the understanding of the rate question which will have substantial value and be welcomed by all who are interested in seeing this problem analyzed from a factual and impartial point of view." Moreover, the board is "particularly gratified" that D. Philip Locklin, professor of transportation economics at the University of Illinois, has agreed to direct the study. Dr. Locklin, as Mr. Smith put it, views the interterritorial-rate subject "as the board views it, in its broadest aspects;" and "we believe that his appointment assures us, and those who are inter-

ested in our work, that on this controversial question, as on others, a report of substantial merit and unquestioned impartiality will be made."

As noted above, Mr. Smith had previously discussed at some length plans for the relative-economy-and-fitness study, which he called "the fundamental problem" the board faces. Ramifications of that study, as the chairman highlighted its scope, will involve getting into such matters as the costs of transportation to carriers and shippers; present carrier organization and operating methods and opportunities for improvements therein; competition in all its aspects; the nature of the traffic which carriers must handle; and the differing traffic problems of the country's various sections. Also, the study is expected to involve a review of "recent and important technological changes which have achieved or promise great improvement in the means of transportation;" an investigation of "methods by which the speed and general efficiency of transportation may be bettered by special high-speed freight trains, by improved highways, and by cooperation between railroads, trucks, and water carriers;" surveys of "the possibilities of pooling less-than-carload traffic," and of means "by which the utilization of freight cars and motive power can be improved;" and consideration of the financing of carriers, economies which unification might bring, and the problems of abandonments and extensions. In the foregoing connection the board is "carrying forward" some of the studies made by Joseph B. Eastman when he was Federal Co-ordinator of Transportation.

As a result of the taxation study, the board hopes that it "may disclose plainly to public view the taxes which every subdivision of government places upon carriers, not only the national government and the states, but also the subdivisions of the states, the various municipalities, and the local taxing districts." In connection with the public-aids study it is "examining again" the field covered by former Co-ordinator Eastman's so-called subsidy report. This "comprehensive report," Mr. Smith said, "is being analyzed exhaustively with a view to adding material and bringing the data up to date, where necessary, and of modifying methods of analysis and conclusions which appear upon the test of experience to require some change." Meanwhile, "it is the purpose of the board to afford all those interested in this important subject a full opportunity to present their views."

The whole task of the board, as Mr. Smith sees it, is "a tremendous and an humbling one." Yet he is sure that, with the "full cooperation" of carriers, shippers, and public bodies, it will be able to make "worth-while progress." As a result of its work the board expects "to make available for the use of practical transportation men, of theoretical transportation students, and of the general public a large amount of fundamental data which will be impartial, accurate, and of very direct application and worth." Aside from its work on the investigations, the board has "performed some specific tasks for other branches of the government which have been engaged in vital defense work;" and it intends "as di-

rected by the order of the President, to cooperate to the fullest degree with the newly-created Office of Defense Transportation."

S. P. Would Discontinue Passenger Trains in No. California

The Southern Pacific has asked the California state railroad commission for permission to discontinue trains No. 7 and 8 between Dunsmuir, Cal., and the California-Oregon state line near Hilt, Cal., and to discontinue all regular passenger service between Black Butte, Cal., and the California-Oregon state line near Hilt. Other arrangements would be made to handle the traffic, and Southern Pacific passenger tickets will also be honored on Pacific Greyhound buses.

Freight Car Loading

Loadings of revenue freight for the week ended January 10 totaled 737,172 cars, the Association of American Railroads announced on January 15. This was an increase of 60,638 cars, or nine per cent above the previous week; an increase of 25,537, or 3.6 per cent, over the corresponding week last year, and an increase of 68,931 cars, or 10.3 per cent, above the comparable 1940 week.

As reported in last week's issue, loadings of revenue freight for the week ended January 3 totaled 674,374 cars, and the summary for that week, compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading			
For Week Ended Saturday, January 3			
District	1942	1941	1940
Eastern	142,422	133,973	130,744
Allegheny	155,877	139,710	126,110
Pocahontas	44,191	39,525	41,824
Southern	105,850	97,403	92,155
Northwestern ..	72,173	68,447	69,692
Central Western ..	101,109	90,200	87,876
Southwestern ..	52,752	44,913	44,524
Total Western Districts	226,034	203,560	202,092
Total All Roads	674,374	614,171	592,925
Commodities			
Grain and grain products	31,505	26,806	27,043
Live stock	10,943	10,187	12,410
Coal	138,286	123,127	149,522
Coke	13,526	12,153	11,592
Forest products ..	32,453	29,819	26,120
Ore	13,024	12,623	9,369
Merchandise l.c.l. ..	122,600	125,101	123,274
Miscellaneous	312,037	274,355	233,595
January 3	674,374	614,171	592,925

In Canada.—Carloadings for the week ended January 3 totaled 49,392, as compared with 43,136 in the corresponding week last year and 45,013 cars for the previous week, according to the statement of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Jan. 3, 1942	49,392	25,487
Dec. 27, 1941	45,013	25,964
Dec. 20, 1941	61,760	32,491
Jan. 4, 1941	43,136	24,258
Cumulative Totals for Canada:		
Jan. 3, 1942	49,392	25,487
Jan. 4, 1941	43,136	24,258
Jan. 6, 1940	38,858	21,300

B. & O. Attains New Operating Records in 1941

The Baltimore & Ohio ran up several new highs in operating efficiency indices in 1941. Figures for the year show that reve-

nue tons were 985 per train, compared with 942 for 1940 and 869 for 1929. Car-miles-per-serviceable-freight-car-day were 40 compared, with 35 for 1940 and 33 for 1929. It should be noted that revenue ton-miles in 1941 were about 0.94 per cent lower than in 1929, indicating that it was not volume of business alone that brought about the operating performance in 1941.

Pension Act Amendment

Representative Collins, Democrat of Mississippi, has introduced H. R. 6357 to increase by six per cent the amount of annuity or pension payable under the Railroad Retirement Act.

Cook Reappointed to Mediation Board

President Roosevelt on January 14 sent to the Senate his reappointment of George A. Cook to be a member of the National Mediation Board for another three-year term ending February 1, 1945.

Equipment Depreciation Orders

Equipment depreciation rates for eight railroads have been prescribed by the Interstate Commerce Commission in a new series of sub-orders and modifications of previous sub-orders in No. 15100, Depreciation Charges of Steam Railroad Companies. The composite percentages for all equipment, which are derived from the prescribed rates, range from 2.94 per cent for the Pittsburg & Shawmut to 12.73 per cent for the Clarion River.

Other roads involved in the series of orders are: Algiers, Winslow & Western; City of Prineville; Minnesota Western; Northampton & Bath; South Omaha Terminal; and Warren & Ouachita Valley.

Trucks Get Short-Notice Authority for Emergency Rates

Common and contract motor carriers having emergency operating authority have been authorized by the Interstate Commerce Commission to establish, respectively, rates and minimum rates covering emergency movements of war materials "without further notice other than posting and mailing copies of publication to the commission."

The permission does not authorize the changing of any rate or minimum rate which had already been established under special permission of the commission for the transportation of emergency war materials and supplies.

Roads with \$10,000,000 Gross Must File Consolidated Statements

"Consolidated statistical statements . . . in the form of a balance sheet, income statement, and profit and loss account" must be filed for the year 1942 and annually thereafter by steam railway companies which had operating revenues of \$10,000,000 or more in 1941, according to an order issued by the Interstate Commerce Commission. The order runs to all roads in the ten-million-dollars-annual-gross class, except "such steam railway companies as are subsidiaries of other steam railway companies."

The "consolidated statistical statements" are to be "in addition to and separately

from annual reports of individual operating companies." Schedules for the filing of the new statements are embodied in the order which also says that the roads involved "shall as early as practicable after January 1, 1942, maintain their books of accounts and other records in such manner as may be necessary for the elimination of intercompany transactions and the preparation of the aforesaid consolidated statistical statements."

Milwaukee Speeds Service Between Chicago and Milwaukee

Service on the Milwaukee Road between Chicago and Milwaukee, Wis., was speeded up, beginning January 12. The 85-mile run is now made in 75 min., from start to stop, by 14 of the trains in the road's fleet of 27 that operate daily between the two cities. Four now make the run in 80 min. and others operate on 85- and 90-min. schedules. A new train leaves Milwaukee at 10:30 p. m., arriving in Chicago at 11:45 p. m., in time for connections with trains for the East and South. Six high-speed trains are now operated without change of cars between Chicago, Milwaukee and Green Bay, Wis.

Illinois Central Fined for Violation of the Elkins Act

On January 9, Federal Judge Michael J. Igoe at Chicago fined the Illinois Central \$8,000 and William Haywood, freight traffic manager, \$1,000 for violations of the Elkins Act prohibiting unfair credit concessions to shippers. As explained in the *Railway Age* of October 25, other roads were recently fined for similar violations in which certain commission men in the Chicago area had been granted long term credits, enabling them to do business virtually on the railroad's credit, placing competitive produce men at a disadvantage. The roads were said to have welcomed court action which enabled them to discontinue a costly practice that had grown during the years.

Court Rules Milwaukee Equities Valueless

The United States Circuit Court of Appeals for the Seventh circuit ruled on January 12 that the equities of preferred and common stockholders of the Chicago, Milwaukee, St. Paul & Pacific were valueless unless earnings should disclose creation of new worth and that, in consequence, the Interstate Commerce Commission need make no further investigation of valuation unless current earnings should warrant. As reported in the *Railway Age* of December 13, the reorganization plan of the Milwaukee had been returned to the I. C. C. by the court on December 4 for specific findings of fact determining the values of properties underlying the various securities.

Evening Trains Pulled Out of Joint Chicago-Florida Service

Effective January 16, the "Dixiana" (Chicago & Eastern Illinois), the Floridan (Illinois Central) and the Florida Arrow (Pennsylvania), regular coach and Pullman trains operating every third day and

providing daily co-ordinated Chicago-Florida service, have been discontinued. The remainder of the daily co-ordinated Florida service has been unchanged, so that daily streamlined service and daily all-Pullman service is still provided. In addition, the Florida trains leaving Chicago at 11:25 p. m. daily on all three routes, which formerly carried sleepers only as far as Jacksonville, Fla., will operate sleeping cars to Miami, Fla.

Remainder of New Fleet of "400's" Go Into Service

The remainder of the fleet of new "400's" of the Chicago & North Western went into service on January 12. The new trains, representing an investment of \$3,500,000, increase the number of streamlined trains of this road entering and leaving Chicago from 19 to 58 weekly. As reported in the *Railway Age* of January 3, these trains provide faster and more convenient service between Chicago and Milwaukee and to numerous points in Northern Wisconsin and Michigan, including Madison, Wis., Janesville, Beloit, Green

Bay, Sheboygan, Manitowoc, Fond du Lac, Menominee, Mich., and Ishpeming. Under the new schedules, Chicago-Milwaukee service will range from 75 min. to 85 min. for the run; 35 minutes is saved in the run of the Capitol "400" between Madison and Chicago as compared to former schedules; an hour to an hour and 15 min. is saved in the runs between Chicago and Green Bay; while as much as 5 hr. and 20 min. is saved between Chicago and Ishpeming.

The first of the new fleet of "400's" between Wyeville, Wis., and Rochester and Mankato, Minn., was placed in service on January 5, as reported in the *Railway Age* of January 10.

I. C. C. Compilation of Income and Balance Sheet Items for October

The Interstate Commerce Commission on January 12 made public its Bureau of Statistics' latest monthly compilation of selected income and balance sheet items, showing October's net income of the Class I railroads to have been \$53,675,973, and that for this year's first 10 months at \$413,333,947. Later figures for November

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS

Compiled from 132 Reports (Form IBS) Representing 137 Steam Railways

(Switching and Terminal Companies Not Included)

All Class I Railways

Income Items	For the month of October		For the ten months of	
	1941	1940	1941	1940
1. Net railway operating income	\$93,648,725	\$87,638,355	\$846,815,740	\$532,132,239
2. Other income	12,781,324	12,106,349	123,182,842	119,593,484
3. Total income	106,430,049	99,744,704	969,998,582	651,725,723
4. Miscellaneous deductions from income ..	2,721,970	2,463,482	27,895,694	25,305,278
5. Income available for fixed charges ..	103,708,079	97,281,222	942,102,888	626,420,445
6. Fixed charges:				
6-01. Rent for leased roads and equip-				
ment	10,145,173	14,144,029	130,210,246	118,481,761
6-02. Interest deductions ¹	38,701,096	38,816,125	386,813,476	392,625,220
6-03. Other deductions	116,115	118,785	1,186,895	1,252,810
6-04. Total fixed charges	48,962,384	53,078,939	518,210,617	512,359,791
7. Income after fixed charges	54,745,695	44,202,283	423,892,271	114,060,654
8. Contingent charges	1,069,722	1,013,749	10,558,324	10,158,377
9. Net income	53,675,973	43,188,534	413,333,947	103,902,277
10. Depreciation (Way and structures and				
Equipment)	18,039,829	17,399,415	180,198,506	171,199,856
11. Federal income taxes	14,533,822	8,326,182	159,662,871	50,073,611
12. Dividend appropriations:				
12-0. On common stock	1,117,312	1,702,398	71,959,086	68,795,394
12-02. On preferred stock	2,014,229	764,781	19,681,072	15,493,151
Ratio of income to fixed charges ² (Item				
5 + 6-04)	2.12	1.83	1.82	1.22

Selected Asset and Liability Items		All Class I Railways	
		Balance at end of October	
		1941	1940
13. Investments in stocks, bonds, etc., other than those of affiliated			
companies (Total, Account 707)		\$549,684,205	\$577,729,789
14. Cash		\$851,667,020	\$626,283,547
15. Temporary cash investments		178,775,439	70,483,324
16. Special deposits		229,038,966	119,409,226
17. Loans and bills receivable		1,262,103	1,421,472
18. Traffic and car-service balances—Dr.		38,029,743	28,876,744
19. Net balance receivable from agents and conductors		77,541,974	56,935,428
20. Miscellaneous accounts receivable		174,590,948	135,592,142
21. Materials and supplies		424,588,179	331,330,449
22. Interest and dividends receivable		22,966,449	21,284,665
23. Rents receivable		1,401,370	1,394,144
24. Other current assets		10,824,744	8,279,825
25. Total current assets (items 14 to 24)		2,010,686,935	1,401,290,966
26. Funded debt maturing within 6 months ³		\$131,524,759	\$65,756,766
27. Loans and bills payable ³		\$56,883,442	\$116,354,628
28. Traffic and car-service balances—Cr.		63,264,146	49,714,135
29. Audited accounts and wages payable		286,068,224	237,660,030
30. Miscellaneous accounts payable		50,537,341	62,542,585
31. Interest matured unpaid		33,350,658	26,605,297
32. Dividends matured unpaid		1,810,939	1,555,069
33. Unmatured interest accrued		79,687,474	81,496,091
34. Unmatured dividends declared		5,957,822	2,163,019
35. Unmatured rents accrued		26,878,782	27,963,692
36. Accrued tax liability		386,475,831	259,603,255
37. Other current liabilities		48,839,893	64,840,231
38. Total current liabilities (items 27 to 37)		1,039,754,552	930,498,032
39. Analysis of accrued tax liability:			
39-01. U. S. Government taxes		252,927,406	118,061,188
39-02. Other than U. S. Government taxes		133,548,425	141,542,067

¹ Represents accruals, including the amount in default.

² Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.

³ Includes obligations which mature not more than 2 years after date of issue.

NET INCOME OF LARGE STEAM RAILWAYS (Switching and Terminal Companies Not Included)

Name of railway	Net income after depreciation		Net income before depreciation	
	For the ten months of		For the ten months of	
	1941	1940	1941	1940
Alton	\$180,324	*\$1,619,427	\$409,833	*\$1,402,449
Atchison, Topeka & Santa Fe ¹	23,526,088	7,644,762	33,790,258	17,646,899
Atlantic Coast Line	7,459,615	556,528	9,444,468	1,150,407
Baltimore & Ohio	19,133,093	2,287,698	25,456,708	8,320,900
Boston & Maine	5,716,428	1,233,692	6,905,490	2,441,694
Central of Georgia ²	1,194,998	*1,781,958	1,920,968	*1,072,318
Central of New Jersey ²	717,195	2,614,903	1,815,833	*1,472,851
Chesapeake & Ohio	33,261,454	27,906,172	40,520,587	34,938,745
Chicago & Eastern Illinois	1,277,344	*1,202,073	1,792,407	*697,365
Chicago & North Western ³	2,751,722	*5,156,443	6,821,049	*1,040,266
Chicago, Burlington & Quincy	9,196,386	2,123,955	13,583,409	6,547,689
Chicago Great Western	1,490,201	*380,166	1,961,932	88,565
Chicago, Milwaukee, St. Paul & Pacific ⁴	5,858,069	*8,588,790	10,910,088	*3,613,300
Chicago, Rock Island & Pacific ⁵	4,874,473	*5,309,063	8,510,027	*1,837,358
Chicago, St. Paul, Minneapolis & Omaha	*609,486	1,839,727	*165,632	1,369,393
Delaware & Hudson	4,024,420	1,493,722	4,978,127	2,396,376
Delaware, Lackawanna & Western	3,323,434	*398,832	5,383,968	1,652,339
Denver & Rio Grande Western ⁶	*2,344,172	3,290,369	*1,231,586	2,254,041
Elgin, Joliet & Eastern	4,919,787	*2,591,862	5,940,486	3,452,870
Erie (including Chicago & Erie) ³	7,353,507	*67,403	10,462,713	2,972,757
Grand Trunk Western	1,635,795	*465,901	2,613,504	518,000
Great Northern	14,446,748	*8,467,752	18,099,064	11,371,536
Gulf, Mobile & Ohio	1,889,858	*608,147	2,598,254	4,104,620
Illinois Central	6,213,828	*1,202,704	11,762,980	4,104,315
Lehigh Valley	3,102,179	*195,018	4,759,071	1,536,529
Long Island	988,219	*864,490	322,426	113,927
Louisville & Nashville	15,092,738	*6,958,684	18,872,510	10,584,404
Minneapolis, St. Paul & Sault Ste. Marie ³	*2,723,580	3,369,348	*1,655,214	2,349,343
Missouri-Kansas-Texas	*112,795	2,586,644	*837,058	1,604,845
Missouri Pacific ³	3,338,625	*9,657,320	7,101,753	5,914,543
New York Central ⁶	22,979,095	5,278,336	38,156,852	18,578,784
New York, Chicago & St. Louis	9,223,292	2,116,429	10,632,637	3,439,873
New York, New Haven & Hartford ²	4,564,827	*3,128,814	7,349,990	*361,519
Norfolk & Western	24,142,082	26,849,660	29,662,734	32,050,380
Northern Pacific	5,735,580	*633,487	9,051,108	2,196,985
Pennsylvania	40,783,627	30,173,121	64,867,023	53,081,450
Pere Marquette	2,839,442	810,880	4,810,375	2,697,235
Pittsburgh & Lake Erie	4,785,055	3,973,005	6,721,620	5,821,943
Reading	8,187,866	4,712,895	10,797,133	7,251,304
St. Louis-San Francisco ³	35,749	*6,828,488	2,542,618	*4,290,615
St. Louis, San Francisco & Texas	109,688	*241,590	109,688	*241,451
St. Louis Southwestern ²	3,306,477	*359,453	3,862,192	172,121
Seaboard Air Line ¹	760,582	*5,082,320	2,807,792	*3,122,245
Southern	14,630,552	3,539,009	18,125,871	6,479,717
Southern Pacific ⁶	33,702,940	3,646,679	40,496,849	10,247,323
Texas & Pacific	2,612,840	1,030,546	3,672,084	2,050,046
Union Pacific (including leased lines)	17,197,441	11,379,239	24,087,179	17,787,155
Wabash ¹	2,471,577	*2,749,756	4,281,021	947,321
Yazoo & Mississippi Valley	1,983,857	*78,664	2,451,242	347,151

¹ Report of receiver or receivers.

² Report of trustee or trustees.

³ Under trusteeship, Erie only.

⁴ Includes Atchison, Topeka & Santa Fe, Gulf, Colorado & Santa Fe, and Panhandle & Santa Fe

⁵ Includes Boston & Albany, lessor to New York Central.

⁶ Includes Southern Pacific Company, Texas & New Orleans, and leased lines. The report contains the following information: "Figures reported above for Southern Pacific Transportation System exclude offsetting debits and credits for interest on funded securities and rentals for leased properties between companies included therein. Operations for 1941 of separately operated Solely Controlled Affiliated Companies (excluding results for Southern Pacific Railroad Company of Mexico), not included in above statement, resulted in a net loss of \$32,299 for the month and \$2,035,311 for the period. These results include \$191,347 for the month and \$2,109,995 for the period, representing interest on bonds of such companies owned by Southern Pacific Company not taken into income by SP Co., and, therefore, not included in the 1941 income results for the system reported above. The combined results for 1941 for Southern Pacific Transportation System and separately operated Solely Controlled Affiliated Companies (excluding SP RR Co. of Mexico) amounted to a net income of \$6,292,553 for the month and \$33,777,624 for the period. Figures herein given exclude results of Southern Pacific Railroad Company of Mexico for the reason that policy was adopted January 1, 1940 of making no further advances to that company, it being required to conduct its operations entirely within its own resources."

* Deficit.

and this year's first 11 months, as reported by the Association of American Railroads, were published in the *Railway Age* of January 3, page 144.

The commission's statement shows that the roads not in receivership or trusteeship had an October net income of \$48,076,166 as compared with \$39,165,578 in the same month last year; while their net income for this year's first 10 months was \$384,409,512 as compared with \$172,366,266 for the same period last year.

One hundred and two roads reported net incomes for October, while 27 reported net deficits; in October, 1940, there were 99 net incomes and 30 net deficits. For this year's first 10 months 102 roads reported net incomes, and 27 reported net deficits, as compared, respectively, with 68 net incomes and 61 net deficits in the same period last year. The consolidated statement for all Class I roads and that showing net

incomes or deficits of "large steam railways" are given in the accompanying tables.

Great Northern Grain Elevator Explodes at Superior, Wis.

On January 10, following two explosions, a raging fire destroyed a grain elevator of the Great Northern containing 1½ million bushels of wheat at Superior, Wis., and threatened the ore and wheat dock area. Two firemen and five elevator employees were injured, none seriously, by the explosions, which were felt several miles away. It soon became evident that the elevator fire could not be extinguished, and the firemen concentrated successfully on efforts to save ore and wheat docks nearby, adjacent elevators and a 16-million-gallon gasoline storage depot.

The damage was estimated to be 2¼ million dollars. One and one-half million

bushels of grain were destroyed and the Great Northern elevator was valued at \$750,000. Although sabotage was considered a possibility, elevator guards said it was probable the explosions were caused by grain dust. The Federal Bureau of Investigation is looking into the occurrence and Governor Julius P. Heil of Wisconsin has asked increased federal help in policing the coal, ore and grain facilities at Superior. The Archer-Daniels-Midland Company, St. Paul, Minn., has announced that plans are under way to build a new elevator with a capacity of three to six million bushels.

Crack-Down of Joint Forwarder- Truck Rates Again Postponed

The Interstate Commerce Commission has further postponed from January 15 until April 15 the effective date of its outstanding orders which require the discontinuance of joint-rate arrangements between forwarders and motor carriers. The orders are in MC-31, Tariffs of Forwarding Companies, and MC-2200, the proceeding involving the status of Acme Fast Freight, Inc.

Meanwhile, Senate and House conferees on pending legislation (S. 210) for the regulation of freight forwarders were tentatively scheduled to meet the latter part of this week to begin the work of ironing out differences between the Senate and House versions of the bill.

Allegheny Ludlum Steel Surveys Transportation Facilities

Railroad, truck, water and air transportation are the subjects of a special issue of "Steel Horizons", a publication of the Allegheny Ludlum Steel Corporation, Pittsburgh, Pa. The issue, which is illustrated and in color, contains an article by Ralph Budd, president of the Burlington, on "What Lies Ahead in Transportation" and surveys of each of the four main agencies of transportation. In the middle of the booklet there appears a two-page spread of a design for a passenger "travel center" of the future by Peter Muller-Munk. This somewhat fanciful piece shows a gigantic airport, bus terminal, two-level railroad station, docks and interurban rapid transit terminal combined as unit.

Mid-West Shippers Advisory Board to Discuss War Problems

Steps that have been and will be taken by the railroads and the shippers to help win the war will dominate the discussions at the annual meeting of the Mid-West Shippers Advisory Board at the Palmer House in Chicago on January 23. The meeting will be addressed by Robert S. Henry, assistant to the president of the Association of American Railroads, at a luncheon sponsored jointly by the shippers board and the Public Affairs Committee of the Traffic Club of Chicago, on the subject Your Country, Your Railroads and You.

The morning session of the board will be featured by the election of officers and members of the Executive committee, reports of committees and the railroads, and a talk on general transportation conditions

by L. M. Betts, manager of the Car Service Division of the A. A. R. National and regional forecasts of carloadings are also on the agenda.

November Accident Statistics

The Interstate Commerce Commission on January 9 made public its Bureau of Statistics' preliminary summary of steam railway accidents for November, 1941, and last year's first eleven months. The compilation, which is subject to revision, follows:

Item	Month of November		11 months ended with November	
	1941	1940	1941	1940
Number of train accidents*	915	687	8,472	6,370
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	169	134	2,027	1,887
Injured	141	123	1,741	1,915
Passengers on trains:				
(a) In train accidents*				
Killed	12	..	17	66
Injured	221	57	1,070	816
(b) In train-service accidents				
Killed	1	1	13	7
Injured	115	124	1,581	1,519
Travelers not on trains:				
Killed	1	..	13	4
Injured	90	67	797	741
Employees on duty:				
Killed	80	50	675	481
Injured	2,287	1,585	22,872	16,243
All other nontrespassers**				
Killed	225	184	1,902	1,743
Injured	766	690	6,104	5,539
Total—All classes of persons:				
Killed	488	369	4,647	4,188
Injured	3,620	2,646	34,165	26,773

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than \$150 to railway property.

** Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Killed	213	177	1,733	1,589
Injured	576	538	4,301	4,024

New B. & O. Train

The Baltimore & Ohio has placed a new all-coach streamliner, "The Columbian," in service between Chicago and Washington, D. C., to handle the coach traffic formerly carried by the "Capitol Limited," which has been converted into an all-Pullman train. Features of the Columbian include an observation lounge with cocktail bar, stewardess-nurse service and a public-address system for announcements en route. The equipment, which has been completely renovated, was secured from the Columbian formerly operating between Washington and New York. The Columbian leaves Chicago at 3:55 p. m. daily, arriving in Washington at 8:55 a. m., and leaves Washington at 6:05 p. m., arriving in Chicago at 9:05 a. m. The time of the Capitol Limited remains unchanged.

February Truck and Bus Quotas

Production of "heavy or medium" motor trucks in February, at a rate approximately 15 per cent greater than in February, 1941, will be permitted under an order issued by Donald M. Nelson, OPM Director of Priorities. During February, 53,435 such trucks may be produced, as compared with 46,245 in the same month in 1941;

the trucks involved are those of a gross vehicle weight of 9,000 lb. or more.

At the same time, Mr. Nelson authorized production in February of 1,065 passenger-carrier vehicles as compared with an estimated 450 a year ago. The increase "is a direct result of the shifting of population in connection with expanded defense areas, and the curtailment of passenger car production which has brought about greater demands upon public transportation systems."

Mr. Nelson extended through February the A-3 preference rating made available for materials going into the production of heavy or medium trucks, truck trailers of five tons cargo carrying capacity or more, and motor or electric passenger carriers seating 15 or more persons. For the first time definite production quotas have been established for manufacturers of heavy or medium trucks and buses; heretofore, production has been regulated according to certain percentages of a base period. Manufacturers are free to produce either heavy or medium trucks, provided they keep within the combined quota. No restrictions are placed on production to fill orders for the Army and Navy and certain other war agencies, allied governments and lend-lease requirements.

The orders do not affect the restrictions in effect in the passenger car field.

Finds Improvement in N. Y. C. Passenger Service

At a "check-up" hearing by the New York Public Service Commission in New York on January 8 to determine whether the New York Central has improved its passenger service, W. G. Himes, transportation engineer for the Commission, testified that since an analysis of the road's service made in February, 1941, entire elimination of, or substantial improvement in 13 alleged defects in service then made the basis of specific criticisms had been made. Mr. Himes also declared that the one-time record of the railroad had improved greatly, although it yet left something to be desired. Chairman Milo R. Maltbie took occasion, however, to criticize the road severely on the time performance of its through trains, suggesting that it revise its schedules to conform more closely with performance.

Canadian Pacific Consolidates Operation of Affiliated Air Lines

Under the jurisdiction of Grant W. G. McConachie, assistant to the vice-president of the Western lines of the Canadian Pacific, the operation and maintenance of affiliated air lines of the Canadian Pacific in that territory are being consolidated under one management. For this purpose Mr. McConachie has recently made several appointments, pending the establishment of a permanent form of organization, and has also grouped the air lines for operating purposes into four divisions, with a division superintendent in charge of each.

The general officers appointed, all with headquarters at Edmonton, Alta., are as follows: C. Becker, general superintendent; W. Straith, superintendent of pilot training, dispatching and meteorological services; N. Dennison, superintendent of maintenance;

and B. Phillips, assistant to the general superintendent. The division superintendents appointed are as follows: W. E. Gilbert, superintendent of the Vancouver division, with headquarters at Vancouver, B. C.; J. Barber, superintendent of the Yukon division, with headquarters at White Horse, Yukon; W. J. Windrum, superintendent of the Mackenzie division, with headquarters at Edmonton, Alta.; and R. W. Ryan, superintendent of the Saskatchewan division, with headquarters at Regina, Sask.

Would Give Attorney General All Legal Power

Senator Holman, Republican of Oregon, has introduced in the Senate S. 2177, a bill which would consolidate the function of furnishing legal advice to government agencies in the Department of Justice. Under the measure, the Interstate Commerce Commission, the Railroad Retirement Board, and all other government agencies would have to give up their legal staffs and get their legal aid from the Attorney General.

The plan would be for the Attorney General to assign certain members of his staff temporarily to various agencies for the purpose of representing them in court actions or advising them on legal matters, but these lawyers would at all times be under the general supervision of the Department of Justice, and subject to the supervision of the head of the agency to which assigned only to extent specified by the Attorney General.

The Biography of Aluminum

Under the title of "Unfinished Rainbows" a technicolor movie has been released telling the story of the development of the Aluminum Company of America. The screen story describes the early efforts of Charles Martin Hall to find a way to extract the metallic aluminum from the ore and how the predecessor of the Aluminum Company and later the company itself had, in many instances, to go into the business of manufacturing such products as cooking utensils in order to convince the user of the value of a then new metal. The introduction of aluminum in new fields and the attendant development of the rolling and extrusion processes now so common in shaping the metal for use in airplanes, railroad cars and highway vehicles is the further theme of the picture.

The film was produced by the Wilding Picture Productions, Inc., and is available for distribution in both 16- and 35-mm.

Morse Named to War Labor Board

Dean Wayne L. Morse of the University of Oregon Law School, who recently served as chairman of the President's emergency fact-finding board in the railroad wage controversy, has been named by President Roosevelt as one of four public members of the new War Labor Board which takes the place of the National Defense Mediation Board. The other public members are William H. Davis, chairman, who was also chairman of the National Defense Mediation Board; George W. Taylor, professor of economics at the University of Pennsylvania, vice

chairman; and Frank P. Graham, president of the University of North Carolina who was also a member of the NDMB. The 12-man board will also have four labor representatives and four employer representatives.

The board will hold its first meeting in Washington on January 16. Like its predecessor, it will have jurisdiction over all disputes in industry except those in the railroad field which come under the National Mediation Board.

C. & N. W. Gets Truck Certificates

Subject to conditions designed to insure that the highway operations shall remain auxiliary to or supplemental of rail service, the Interstate Commerce Commission, Division 5, has granted to the Chicago & North Western a certificate covering common carrier trucking operations over routes between Fulton, Ill., and Omaha, Nebr., and between Missouri Valley, Iowa, and Sioux City. Some 75 C. & N. W. stations are on the routes which parallel approximately 435 miles of its rail line.

In establishing the conditions under which the certificate is granted the commission imposed the so-called "key points" condition instead of that more restrictive one which has been imposed in some cases to require that shipments handled by truck be limited to those handled in through service involving a prior or subsequent haul by rail. The "key points" condition in the present case stipulates that no shipments shall be transported by truck "between any of the following points, or through or to or from more than one of said points: Clinton, Iowa, Cedar Rapids, Marshalltown, Boone, Carroll, Missouri Valley, Sioux City, and Omaha, Nebr."

W. S. Murray—R. R. Electrifier—Dies at 68

William Spencer Murray, a consulting engineer, who directed the electrification of the New York, New Haven & Hartford, died at his home in New York on January 9 at the age of 68, after a brief illness. Born in 1873, Mr. Murray was educated at Lehigh University where he was awarded a degree in electrical engineering in 1895. He then went with the Westinghouse Electric & Manufacturing Company at East Pittsburgh, Pa., where he remained for seven years. In 1902 he established himself as a consulting engineer in Boston, Mass.

In 1905, when Mr. Murray was 32, he was asked by the New York, New Haven & Hartford to take full charge of its electrification project between New York and New Haven, Conn. In assuming the job—which in its early stages called for a sacrifice of income as compared with his earnings as a consulting engineer—he faced the problem of choosing the type of current transmission and collection, voltage, speed, etc., for the country's first long-distance, high-tension trunk line railroad electrification. In spite of considerable opposition from other experts Mr. Murray electrified the New York, New Haven & Hartford with an overhead catenary system carrying 25-cycle alternating current at 11,000 volts. After the New Haven work, Mr. Murray electrified the Boston & Maine's

Hoosac Tunnel and the New York, Westchester & Boston.

In 1913 while directing the electrification project, Mr. Murray, together with Edwin H. McHenry, founded the firm of McHenry & Murray. This firm was dissolved in 1917 when the New Haven electrification project was completed. In 1921 Mr. Murray joined Henry Flood, Jr., to form the firm of Murray & Flood, New York. He was author of the idea of making a comprehensive survey of power facilities in this country and in 1922 presented a comprehensive analysis to the government with suggestions for a super-power plan.

Representation of Employees

Results of recent elections in representation-of-employees cases have been announced by the National Mediation Board. The National Council of Railway Patrolmen's Unions, American Federation of Labor, has won the right to represent patrolmen, including watchmen-clock pullers, in the police department of the Chicago, Rock Island & Pacific; and patrolmen, including train riders, desk sergeants and non-supervisory sergeants in the police department of the New York Chicago & St. Louis.

On the Maine Central, the Sheet Metal Workers International Association, operating through the Railway Employees' Department, A. F. of L., retained the right to represent sheet metal workers, their helpers and apprentices; while machinists, blacksmiths, carmen, and their helpers, on the Berlin Mills have also chosen organizations operating through the Railway Employees' Department, A. F. of L. Machinists, boilermakers, blacksmiths, carmen, powerhouse employees and railway shop laborers of the Fairport, Painesville & Eastern have chosen the United Mine Workers, C. I. O.

Pay Increase for Truck Drivers

The National Defense Mediation Board has awarded increases of four-tenths of a cent per mile and 10 cents an hour and a six-day vacation with pay to approximately 50,000 "over-the-road" drivers in 12 mid-western states, William H. Davis, board chairman, announced on January 5. The award is retroactive to November 16, 1941, the date the old contract expired.

The International Brotherhood of Teamsters, A. F. of L., and the Central States Employers Negotiating Committee, the parties to the dispute, had agreed to submit the controversy to binding arbitration by the board. The award also recommended that fair geographic and state differentials be established and maintained by agreement between the parties. It set a two-year limit on the contract and refused to make an award on 13 other disputed points, most of which concern working rules, which the board stated "can most realistically be decided by the employees and the employers themselves."

In making its award on wages the board pointed to increases in living costs since the last contract was written between the parties in November, 1939, and the wage increases granted by the railroads.

"After careful analysis of the evidence," the board stated, "we have concluded that

adequate compensation for rising living costs and the reestablishment of the balance between wages for employees in the railroads and in the trucking industry in this area can be achieved by an increase in the basic wage scale for 'over-the-road' drivers in the 12-state area of four-tenths of a cent a mile and 10 cents per hour." The basic rate in the old contract was 80 cents per hour and 3 cents a mile.

Railroads Lose "Grandfather" Case

The United States Supreme Court at its January 12 session unanimously upheld an Interstate Commerce Commission order interpreting the so-called "grandfather" provisions of the 1935 Motor Carrier Act. The order of the commission, which was opposed by some 71 railroads in all parts of the country, granted the John P. Fleming Driveaway Service the right to transport new cars to any point in 10 widely scattered states.

The railroads took the position that the commission was without authority to authorize Fleming to serve a whole state where his services had been limited to only a few points in the state. In other words, the court, in the opinion written by Justice Douglas, declared that the argument is that any rights obtained under the "grandfather clause" should be delimited to the actual area in which the applicant was in bona fide operation during the period in question.

The Court rejected this argument and held that whether a trucker's operation "in a particular state was 'bona fide' is a question of fact for the commission to determine."

J. L. Beven States Illinois Central War Policy

J. L. Beven, president of the Illinois Central System, has publicly announced a war policy for the Illinois Central. This statement, which has been published in newspapers along the lines of the Illinois Central is as follows: "Three years ago, when the world was substantially at peace, this writer issued a declaration of business policy to mark the occasion of his taking office as president of the Illinois Central System.

"But veritably a lifetime has been lived in those three short years. Today we are engaged in a world war, a war that endangers the continuation of our nation's freedom and our American way of life. That war now takes precedence over everything else.

"So now I restate our policy in terms of the war. To suffer hardships, if those hardships are necessary, will be not a sacrifice but a privilege, as has been so ably revealed. If the army or the navy or the marine corps or military production needs something the Illinois Central has to offer, that service will be provided in the certain knowledge that our regular customers will understand and gladly yield if temporarily inconvenienced or discommoded.

"We must win the war. Yet, to the extent that may be permitted, we hope to provide:

"For business and individuals, adequate and dependable transportation, pleasant service, continued improvements, fair and

reasonable rates that will stimulate commerce and yet cover our costs.

"For our workers, reasonable wages, fair treatment, good working conditions, modern tools.

"For our investors, a return that will maintain credit and attract needed new capital.

"For our friends and neighbors, performance that will command—and deserve—their continued confidence and good will.

"But all these are as nothing if we lose the war. We must WIN the war. To that end we of the Illinois Central pledge our hearts, our hands, our every effort."

Nelson Heads War Production Board

Appointment of a War Production Board with Donald M. Nelson as chairman was announced by President Roosevelt on January 13. The new board, the announcement said, "will be granted the powers now exercised by the Supply Priorities and Allocations Board, and Mr. Nelson in addition to being chairman, "will be charged with the direction of the production program and will have general supervision over all production agencies"; his decision "as to questions of procurement and production will be final."

Mr. Nelson, a former executive of Sears, Roebuck & Company, has been director of priorities in the Office of Production Management and executive director of SPAB. As indicated above, SPAB will be absorbed in the new set-up, while Mr. Nelson will no longer serve as priorities director; as the President's announcement put it, he will "devote his entire time to directing the production program." The new Nelson role is being compared to the World War I position of Bernard M. Baruch who was director of the War Industries Board.

Meanwhile, Vice-President Wallace who headed SPAB will serve as a member of the War Production Board, as will other members of SPAB. The latter are: Secretary of War Stimson; Secretary of the Navy Knox; Secretary of Commerce Jones; Director General Knudsen and Associate Director General Hillman of OPM; Administrator Henderson of the Office of Price Administration; and Harry L. Hopkins, special assistant to the President.

Railroad Industry Advisory Committee is Named

Formation of a railroad industry advisory committee, the function of which will be to consult with the Office of Production Management on problems of the railroad industry arising out of the war program, was announced on January 14, by Sidney J. Weinberg, chief of the OPM Bureau of Industry Advisory Committees.

The membership of the committee is as follows:

C. D. Young, vice-president in charge of real estate, purchases, and insurance of the Pennsylvania; George D. Brooke, president of the Chesapeake & Ohio; William M. Jeffers, president of the Union Pacific; A. T. Mercier, president of the Southern Pacific; J. B. Hill, president of the Louisville & Nashville; O. H. Nance, president of the

Canton; C. A. Liddle, president of the Pullman-Standard Car Manufacturing Company; J. F. MacEnulty, president of the Pressed Steel Car Company; W. E. Hedgcock, vice-president of the American Car & Foundry Company; W. H. Harman, vice-president of the Baldwin Locomotive Works; W. C. Bower, vice-president in charge of purchases and stores of the New York Central; F. J. Gavin, president of the Great Northern; E. J. Engel, president of the Atchison, Topeka & Santa Fe; E. E. Norris, president of the Southern; C. W. Pidcock, Jr., president of the Georgia Northern; V. C. Armstrong, vice-president of Poor & Co.; F. A. Livingston, president of the Ralston Steel Car Company; Alva W. Phelps, assistant general manager of the Electro-Motive Corporation; T. M. Evans, president of the H. K. Porter Co.; S. G. Down, vice-president of the Westinghouse Air Brake Company; William B. Given, Jr., president of the American Brake Shoe & Foundry Company; Ralph Budd, president of the Chicago, Burlington & Quincy; F. B. Ernst, vice-president of the American Steel Foundries Company; A. A. Frank, president of Standard Railway Equipment Company; and L. N. Selig, president of the General American Transportation Company.

L. c. l. Service Is Found Below Par

(Continued from page 223)

and coke, iron, grain and livestock departments. Noting that there are exceptions, he nevertheless maintained that the Pennsylvania is the only road "that has really gotten any outstanding results." The report had much to say of alleged deficiencies which may be summarized as follows:

(1) The distribution of merchandise car schedules is "hit-or-miss." There are instances of traffic managers who have received no information on routes, speed, etc., since 1932.

(2) Cars are taken off and put on by operating departments without consulting the traffic department and without notice to shippers and receivers. This destroys the value of printed schedules which the roads distribute.

(3) Schedules are not being maintained. Not more than three or four of the 18 Eastern roads are making any constructive effort to check their less-carload schedules.

(4) Shippers are having increasing difficulty with stray shipments, with resultant delays.

The four-point program recently suggested by Colonel J. Monroe Johnson of the Interstate Commerce Commission was discussed in detail by the Executive committee whose action was adopted by the Board as follows, each of the four points being separately considered:

(1) *Load and unload cars on a seven day week basis.* The board took a neutral position, with notation that railroads should render their usual week-day service each day. Discussion of the problem of picking up order bills of lading on Saturday and Sunday ended with the remark

that the American Bankers' Association would probably co-operate to solve the difficulty.

(2) *Eliminate shippers' right to route freight.* Board voted opposition thereto, with respect to both carload and l. c. l. freight. G. F. Hichborn, traffic manager, United States Rubber Company, said, however, that he would be willing to have the railroads pool l. c. l. cars or establish "sailing-day" programs. Mr. Huntington said that "we will be very happy to see the old dispatch system come back in some form or other; we have been fighting for it for the last several years under other names and titles."

(3) *Cancel the average demurrage agreement.* The Board expressed opposition. In presenting the matter for consideration the Executive committee said: "Both the carriers and shippers have always contended that the average demurrage agreement has worked to their mutual advantage. The very splendid record of railroad service in 1941 proved to our satisfaction that co-operation between carriers and shippers is more effective in securing the proper result than any unwarranted penalty charge. If there are shippers who are not using every effort to load and unload cars promptly, we have full confidence in the special Efficiency Committees of your Board to correct any such situation."

(4) *Place intra-plant cars on straight demurrage.* Board expressed opposition.

Members of the Board attended a luncheon tendered to 16 "old-timers" by the Traffic Club of Newark, Newark Railroad Club, Newark Chamber of Commerce, New Jersey Industrial Traffic League and the New Jersey State Chamber of Commerce. W. J. Williamson, general traffic manager, Sears, Roebuck & Co., who was scheduled to speak, was unable to leave his home on account of illness. R. W. Brown, president, Lehigh Valley, presented the report of the Railroad Contact Committee, of which he is chairman, during the time allotted to the speaker.

In answer to previous inquiries about the rate of delivery of new equipment, Mr. Brown reported that of the 21,589 new freight cars on order as of December 15, 1941, 7,270 have been on order five months; 5,675 on order six months; 2,750 on order seven months and more than 2,400 on order eight months or more. Reviewing further the situation he revealed that 6,753 new cars were received from builders in the last three months of 1941. Of this total 2,492 were on order seven months; 1,841 on order eight months and 1,100 on order more than nine months. The balance of 770 cars were secured in five months' time.

Mr. Brown took pains to point out that, in ordering new cars, the carriers generally have anticipated a change in character of traffic to be offered and have, therefore, consulted important shippers to determine whether their business has changed, or is likely to change in character. Depending on the results of such conferences, orders for special types of cars are placed in substitution for the types of cars required under normal conditions. As for the proposed seven-day week for industry, Mr.

Brown asserted that the railroads are themselves on such a week and would welcome industry's shift to seven days as much as they deplored its shift from the six-to-the-five-day week.

L. M. Betts, manager, Closed Car Section, Car Service Division, Association of American Railroads, reviewed the national situation. Commenting on the average increase in carloadings of 8 per cent forecast for the first quarter by all the advisory boards, the speaker asserted: "There is going to be a tremendous drop in traffic offered to the railroads in commodities which we are forced to consider non-essentials. . . . We are going to adjust our car supply to the requirements of the movement of those things which are essential to a successful culmination of this endeavor. . . . We are hopeful and it is our expectation that we are going to take care of commercial requirements at the same time. I believe we can do so, with the exception possibly of a spot here and there, where some particular type of car is greatly needed in connection with the defense movement.

"Our chief difficulty is going to be in those special types of cars required for the specialized new kind of machinery and things of all kinds that go into military endeavor. We are going to load tanks, I see from Mr. Chrysler, next year by the trainload. We are already turning out trucks by the trainload."

Officers re-elected for the coming year were: General Chairman, C. J. Goodyear, traffic manager, Philadelphia & Reading Coal & Iron Company, Philadelphia, Pa.; General Secretary, R. C. Huntington, secretary, Casey Jones Incorporated, Baltimore, Md; Secretary, L. A. Christiansen, Car Service Division, Association of American Railroads, New York. Elected for the year were: First Alternative General Chairman, C. H. Vayo, general traffic manager, Eastman Kodak Company, Rochester, N. Y., and Second Alternate General Chairman, C. J. Fagg, manager, Commerce & Trade Bureau, Newark (N. J.) Chamber of Commerce.

Transport Report of National Resources Planning Board

The National Resources Planning Board's transportation study has yielded "salient findings and recommendations to form an integrated and concise statement of transportation policy," according to a report covering the board's work for the two-year period ended June 30, 1941, which was submitted to President Roosevelt on January 14. The report on the transport study, which was made under the direction of a committee headed by Owen D. Young, former chairman of the General Electric Company, has not been made public; it is understood that it is now in the final-review and printing stages.

The aforementioned reference to transportation in the board's review of its work covers about two-thirds of a page. It tells how the transport survey got under way in 1940 when President Roosevelt asked the board "to initiate a study of the nation's transportation problems, to picture the way the transportation system might look in 1950 and to suggest desirable changes in

transportation policy for better coordination and use of all transport media, and to outline the role of government in effectuating these changes." The board then goes on to tell how the work in connection with the study was organized "at three levels." First, a "series of interrelated reports on the several modes of transportation" were prepared by members of the staffs of other federal agencies concerned with transportation problems; second, "a small nucleus staff was assembled to synthesize available materials and bring them to bear on the problem of formulating a coordinated transport policy."

"These issues of transport policy," the board adds, "have been analyzed with reference to: (a) The impact of changing modes of transport and of changing standards of service in a national economy; (b) the utilization of our existing transport facilities in terms of overcapacity and undercapacity by regions and by modes of transport; (c) the impact of transport on the pattern of economic activity; (d) the relation of the rate structure to facilities and resources; (e) the problem of effectuating a rational coordination of the several modes of transport; (f) the role of public action in meeting the transport problem in its various phases."

Finally, came the work on the third of the aforementioned "three levels" — the gleanings "from the staff syntheses and agency reports" of the "salient findings and recommendations" noted above. The main emphasis of the transport study, as the board put it, "has been focused, not on fact-finding procedures, but on the development of policy recommendations as to the more acute problems in the transportation field."

Railroad Export Traffic

Railroads handled to north Atlantic ports in 1941 approximately the same volume of export freight as in 1918, yet traffic moved into those ports in the past 12 months has been handled smoothly and without congestion by the carriers, the Association of American Railroads announced on January 14.

In regard to the Pacific Coast ports, the railroads through the manager of port traffic, Car Service Division, A. A. R., have placed in effect a permit system to regulate the movement of export freight into those ports. Under that plan, commercial export freight consigned to Pacific ports will not be accepted by the railroads unless steamer space has been definitely allocated for such shipments. This plan has been placed in effect to prevent excessive accumulations of commercial export freight at those points and the use of freight cars for storage purposes. It means, says the A. A. R. announcement, that the volume of export traffic moved by the railroads to the West Coast will depend entirely on the number of ships that are available to handle that traffic.

Export freight handled at north Atlantic ports—Portland, Me., to Hampton Roads, Va., inclusive—amounted in 1941 to 414,429 cars, excluding grain or coal, compared with 346,913 in 1940, or an increase of 19.5 per cent. In 1918 such traffic handled through those ports totaled 416,-

011 cars. In other words, it was pointed out, the volume of export traffic handled at north Atlantic ports in 1941 was 99.6 per cent of that during 1918, the peak year of World War I. The total number of cars, domestic and export, unloaded at the Port of New York alone in December, 1941, was 106,405 compared with 100,186 in December, 1918.

Cars of grain unloaded at north Atlantic ports increased from 27,060 in 1940 to 44,486 in 1941 or 65 per cent, the statement declared. Export traffic moved into all ports along the Atlantic, Gulf, and Pacific Coasts in 1941 amounted to 632,079 cars, excluding grain and coal, compared with 565,141 in 1940, or an increase of 12 per cent. Grain unloaded at those ports increased from 34,427 in 1940 to 48,661 in 1941, or 41 per cent, while coastal traffic decreased 10 per cent.

Must Pay Dividends on Worthless Stock of Defunct Railroad

The Southern must continue to pay dividends of 4 per cent—amounting to \$226,008 a year—on 56,502 certificates representing stock of the Mobile & Ohio, although the stock itself became worthless upon receivership sale of the M. & O.; the property of the latter is no longer controlled by the Southern and has been merged with the Gulf, Mobile & Northern to form the Gulf, Mobile & Ohio. Furthermore, stockholders of the Southern itself have received no dividends for a number of years.

This obligation to pay the dividend in perpetuity results from a decision of the New York State Court of Appeals on January 9 affirming without opinion a ruling of the State Supreme Court dismissing an action brought by the Southern in 1940 to have the court declare that it is no longer liable for dividend payments on Southern-Mobile & Ohio stock trust certificates. Observers believe that unless a constitutional question is raised this decision will stand as final.

The Southern acquired a majority of the stock of the Mobile & Ohio in 1901 and issued in substitution therefor to M. & O. stockholders stock trust certificates granting dividends of 4 per cent on the stock in perpetuity. When the property of the Mobile & Ohio was sold at auction in 1940 its stock was found to be without value. Therefore the Southern no longer controlled the road. Furthermore, in the same year the M. & O. was merged with the G. M. & N. and lost its identity. Hence the Southern in fairness to its own stockholders, sought to have the courts rule as to whether its obligation to pay dividends on the worthless stock was binding. On November 6, 1940, Justice W. T. Collins of the New York State Supreme Court dismissed the action holding that "in the court's opinion the stock trust certificates issued by the plaintiff embodied an express and unequivocal promise on plaintiff's part to make specified payments in perpetuity, regardless of whether dividends were actually declared upon the deposited stock and irrespective of the amounts of any dividends which might be declared thereon."

On May 15, 1941, the Appellate division of the Supreme Court of New York State upheld Justice Collins' order on a divided

vote of four-to-one. This decision permitted appeal to the highest court of the state which was done. Arrears in dividend payments to October 18, 1941, total \$237,014, representing interest payments for April and October, 1941, plus penalty interest. This sum has been deposited in escrow with J. P. Morgan & Co., New York, and is now being held for disposition according to the final order of the court.

Hearings Resume on Sizes and Weights Measure

Hearings on S. 2015, Senator Wheeler's (Democrat of Montana) bill to give the Interstate Commerce Commission power, upon complaint, to set aside state laws governing sizes and weights of motor vehicles engaged in interstate commerce were resumed this week before a Senate interstate commerce subcommittee with Thomas H. MacDonald, commissioner of the Public Roads Administration as the principal witness. The hearings had been in recess since around the middle of December.

Mr. MacDonald reviewed the entire road situation in the United States and told the subcommittee that he was in general agreement with the recommendations of the commission regarding the subject of sizes and weights of motor vehicles, but that he did not believe that the present bill carried out those recommendations. In other words, the Public Roads Commissioner does not agree with the bill in its present form and went on to suggest some amendments to it.

The bill as drafted would simply permit the commission to obtain a technical report on road conditions from the Public Roads Administration and the state highway department, but Commissioner MacDonald would change this so as to require a technical report recommended by his agency and the state highway department before the commission could take any action to set aside state sizes and weights regulations. However, in a time of emergency, he would change this so that a technical report endorsed by either his agency or the state highway department would authorize the commission to set aside state regulations.

Mr. MacDonald also voiced the opinion that certain states now have too high a load limit for the good of their roads and that these should be reduced. Also, the Commissioner does not believe that uniform sizes and weights should be attempted at this time.

He went on to cite the states of Oregon and Kentucky as the worst offenders on low weight and size restrictions, declaring that these regulations are impeding the flow of defense traffic in the surrounding states. He told the subcommittee that Oregon has a very low weight restriction on interstate movements but that it permits logging trucks to use its highways intrastate despite the fact that they carry "very heavy loads and are exceedingly destructive" of surfaced roads.

Another witness before the subcommittee was L. F. Orr, general traffic manager of the Pet Milk Company, who appeared as chairman of the Highway Transportation Committee of the National Industrial

Traffic League. The League, declared Mr. Orr, favors the commission being given authority to increase state maximum size and weight limitations applying to motor vehicles, or combinations thereof, moving in interstate or foreign commerce across state lines and across states to safe and sound standards recommended by highway engineering and safety authorities.

It was his personal opinion, supported by automotive engineering authority, he said, that the carrying capacity of present freight carrying motor vehicles could be increased by at least 15 per cent by removal of "these unduly restrictive limitations."

"We do not recommend," asserted Mr. Orr, "that an attempt be made to secure uniformity because physical conditions are not uniform throughout the nation. But based upon our practical knowledge of conditions throughout the country as well as our nationwide experience in the operation of motor vehicles, we recommend that the commission only be given authority to establish maximum limitations below which a state may not go in establishing its limitations for vehicles operating in interstate commerce moving across state lines into or across a state or states."

Fred Brenckman, president of the National Council of Private Motor Truck Owners, Inc., told the subcommittee that his group has taken no position in favor of or opposed to federal regulation of sizes and weights. It has taken the position, however, he declared, that if such regulation is favorably considered by the Congress it should be limited to the application of such regulation only for the purpose of removing unreasonable restrictions to the free flow of commerce between the states, and that the powers delegated to the regulatory body by the Congress should be closely defined with respect to this limitation.

New Preference-Rating Forms

Assignment and extension of individual preference ratings has been simplified and made more uniform by Priorities Regulation No. 3, announced January 12 by Donald M. Nelson, director of priorities, Office of Production Management.

Beginning February 2, 1942, individual preference ratings of the type which has heretofore been assigned on PD-1 and PD-3 forms may be extended to suppliers and sub-suppliers of the producer who receives the rating by a simple endorsement on purchase orders.

Under an arrangement between the director of priorities and the Army and Navy Munitions Board, ratings assigned by Army and Navy field officers will no longer be limited to items appearing on the Army and Navy Priorities Critical List. However, under Regulation No. 3, extension of individual ratings will be limited to material which will be physically incorporated in the items originally rated.

Two new forms of Preference Rating Certificates, PD-1A and PD-3A, will replace the present forms, PD-1 to PD-5 inclusive, for assignment of individual ratings. Use of the new forms will be optional on and after February 2 and manda-

tory on and after March 1. Form PD-1A which will replace Form PD-1 is a simplified blank to be used in making specific applications for materials or supplies when general preference orders do not provide the required priority assistance. When PD-1A applications are approved by the OPM Priorities Division, ratings will be assigned on the form itself. A similar procedure has been standard for some months. Form PD-2, which was formerly used to assign ratings in response to applications on PD-1 forms, will disappear and will not be replaced.

Form PD-3A will be used for all applications for ratings in connection with orders from the Army, Navy, Coast Guard, Maritime Commission, Coast and Geodetic Survey, Panama Canal, National Advisory Committee on Aeronautics, Civil Aeronautics Authority, Office of Scientific Research and Development, Procurement Division of the Department of the Treasury, Surplus Marketing Administration of the Department of Agriculture, and contracts or purchase orders from foreign governments. It will replace Forms PD-3, PD-4, and PD-5.

Another important change made by Priorities Regulation No. 3 allows the recipient of an individual rating, his suppliers and sub-suppliers to employ the rating for replacement in inventory of materials used in filling the rated order, provided such replacement does not increase inventories above a practicable working minimum.

Great Lakes Traffic Breaks All Records in 1941

Bulk freight traffic on the Great Lakes in 1941 soared to 169,020,975 net tons, an increase of 26,145,990 net tons or 18.3 per cent over the former record established in 1940, according to A. T. Wood, president of the Lake Carriers' Association. The quantities transported in 1941 of the five commodities that comprise the lake bulk freight traffic, in net tons, were as follows: Iron ore, 89,730,323; bituminous coal, 49,733,234; limestone, 17,633,448; grain, 11,387,480; and anthracite coal, 536,490. All five commodities, except grain, set new records for lake movement.

Livestock to and from the South

What would amount to a new rate structure and transit arrangements on live stock to and from the South has been recommended to the Interstate Commerce Commission in a proposed report by Examiners A. S. Worthington and T. Leo Haden. The proposed report, covering 100 mimeographed sheets plus appendices, is in I. & S. No. 4779 and it embraces also other I. & S. cases and a number of complaint proceedings.

Generally speaking the examiners would fix rates lower than the present basis; they set up mileage scales which they would have the commission prescribe for application within the South and between the South and East. Combinations of proportionals based on Mississippi river crossings would be prescribed for application on traffic from the Western district to the South.

Construction

CHICAGO & NORTH WESTERN.—A contract has been awarded the T. S. Leake Construction Company, Chicago, for the construction of a machine shop addition to the enginehouse at Proviso yards, Proviso, Ill., for servicing large locomotives. The addition will be approximately 50 ft. by 75 ft. in size, of brick and steel construction.

KANSAS CITY TERMINAL.—Division 4 of the Interstate Commerce Commission has extended from December 31, 1941, to December 31, 1942, the time within which this company shall complete the construction of a line of railroad in Jackson County, Mo. The case is listed as Finance Docket No. 8480.

PENNSYLVANIA.—Reconstruction of the Jersey City, N. J., stockyards, which were partly destroyed by fire on May 31, 1941, has been started by this railroad, which has been granted a permit by the city to rebuild the pier and steel cattle sheds. The new pier, which will be constructed of concrete and steel, will be 1,314 ft. long and 139 ft. wide. It will replace the old pier of piling and timber, in the northeast section of Harsinus Cove yard at Sixth street and the North river, Jersey City. Construction of 126 new fireproof pens to replace those destroyed in the fire last May is also planned. The work, which is being carried out by Allen N. Spooner & Son, Inc., contractors, of New York, according to plans and specifications prepared by the chief engineer of the railroad, is expected to be completed in about eight months.

The Jersey City stockyard, which is operated by the Jersey City Stockyard Company, is the distributing point serving New York harbor receivers who ship their livestock to New York via the Pennsylvania. Before the fire, it consisted of 264 large holding pens and 104 smaller pens. Not all of these were destroyed in the fire. Fifty-four of the large pens had been used for the storage of hogs and the remaining 210 large pens for cattle, sheep and calves. The smaller pens were utilized to accommodate small lot assignments of animals for sale direct at the Jersey City livestock market.

TREMONT & GULF.—This company has been granted authority by Division 4 of the Interstate Commerce Commission to (1) construct a line extending from a point on its existing line, about 13.5 miles south of Tremont, La., in an easterly direction to a connection with the southern end of the line of the Brown Paper Mill Company, 9.5 miles, and (2) operate under lease a part of the paper mill company's line, 15.6 miles, and under trackage rights over the remainder, 1.5 miles, all in Jackson and Ouachita Parishes, La.

UNITY.—Division 4 of the Interstate Commerce Commission, in Finance Docket No. 13286, has ordered that the time within which this company shall commence and complete the construction of an extension of its line in Allegheny County, Pa. be further extended to March 1, and July 1, respectively.

Equipment and Supplies

LOCOMOTIVES

U. S. War Department Orders 50 Steam Locomotives

The United States War Department has placed orders for 50 side tank steam switching locomotives for export (reportedly to the Near East). Of 0-6-0 type wheel arrangement, with 16½ x 24 in. cylinders, the locomotives are designed for use on standard gage tracks. The order was divided 20 locomotives to the Vulcan Iron Works, 15 to the Davenport-Besler Corporation and 15 to the H. K. Porter Company. Complying with urgent instructions of the Government, it is expected that the engines will be completed about the middle of this year.

THE ARGENTINE STATE RAILWAYS are inquiring for from 10 to 15 steam locomotives of 4-6-2 wheel arrangement.

THE PETROLEOS MEXICANOS is inquiring for two steam locomotives of 2-8-2 wheel arrangement.

THE CHESAPEAKE & OHIO has awarded a contract to the Lima Locomotive Works, Lima, Ohio, for 15 steam switching locomotives of the 0-8-0 type, which will cost approximately \$1,257,000. Inquiry for this order was reported in the *Railway Age* of January 10.

THE NATIONAL STEEL COMPANY OF BRAZIL is reported to have ordered nine steam locomotives, including two of the 2-8-2 type, four of the 0-6-0 type and three of the 0-4-0 type, from the H. K. Porter Company. An inquiry for eight steam locomotives by this company was reported in the *Railway Age* of September 27, 1941.

FREIGHT CARS

THE GRAND TRUNK WESTERN is inquiring for 200 box cars of 40 tons' capacity.

THE ARGENTINE STATE RAILWAYS are reported to be in the market for 400 flat cars of 40 tons' capacity.

THE UNITED STATES WAR DEPARTMENT, Engineering Corps, is inquiring for 350 flat cars of 50 tons' capacity.

THE NEW YORK CENTRAL has ordered three 125-ton transformer cars from Despatch Shops, Inc.

THE PITTSBURGH & WEST VIRGINIA will build 100 40½-ft. steel box cars of 50 tons' capacity in the company's own shops. The inquiry for this equipment was reported in the *Railway Age* of November 1, 1941.

MOTOR VEHICLES

THE DENVER, COLORADO SPRINGS, PUEBLO MOTOR WAY, INC., Chicago, Burlington & Quincy affiliate, has ordered two air-conditioned motor coaches from the a. c. f. Motors Company.

Supply Trade

F. J. Carr has been elected vice-president of finance of the **American Steel & Wire Co.**, subsidiary of the United States Steel Corporation. C. S. Morris has been appointed supervisor of accounting and Ogden Ashley has been made assistant to Mr. Carr.

W. Edgar Hamsher, service engineer of the **Hennessy Lubricator Company**, has been appointed vice-president of that company. Prior to joining the Hennessy Lubricator Company in 1923, Mr. Hamsher had been employed with the Pennsylvania at Chambersburg, Pa.

Max W. Babb, whose election as chairman of the board of the **Allis-Chalmers Manufacturing Company**, Milwaukee, Wis., was reported in the *Railway Age* of January 10, was born in Mount Pleasant, Iowa, in 1874, and graduated from Iowa Wesleyan College in 1895, subsequently studying law at the University of Michigan, where he received his LL.B. in 1897. Upon leaving the University Mr. Babb became associated with his father and practiced



Max W. Babb

law at Mt. Pleasant for seven years. In 1904 he moved to Chicago and joined the Allis-Chalmers Company (now the Allis-Chalmers Manufacturing Company) as its attorney. In 1913 Mr. Babb was elected vice-president and in 1932 he was elected president. Mr. Babb is also a director and a member of the executive committee of Allis-Chalmers, a director of the Federal Reserve Bank of Chicago, a trustee and member of the executive committee of the Northwestern Mutual Life Insurance Company, a director of Cutler-Hammer, Inc., and a director of the Wisconsin Telephone Company.

A. L. Freedlander, president and general manager of the Dayton Rubber Manufacturing Company, Dayton, Ohio, was appointed deputy to the chief of the Rubber and Rubber Products division of the Office of Production Management, December 26. Mr. Freedlander has been in the rubber industry for 28 years. Leaving the development division of one of the large Akron companies 22 years ago, he joined

Dayton Rubber in the capacity of factory manager. Several years later he was made vice-president; and, in 1936, became president and general manager. Mr. Freeland is credited with a long list of developments in rubber chemistry, engineering and manufacture. He served the government during the first World War.

The Jones & Laughlin Steel Corporation of Pittsburgh, Pa., has announced changes involving its district sales offices in New York, Washington, D. C., Chicago, and Memphis, Tenn., and the creation of a new district office in Tulsa, Okla. **John B. DeWolf** has been transferred as district sales manager from New York to Washington; **S. A. Fuller** from Chicago to New York; and **Ernest W. Harwell** from Memphis to Chicago. **E. E. Hoehle**, formerly assistant district sales manager at Memphis, has been appointed sales manager in that city. **R. J. Woods, Jr.**, formerly sales engineer in the Memphis office, has been appointed district sales manager in the new sales office at Tulsa.

W. C. Buchanan, whose election as president of the **Allis-Chalmers Manufacturing Company**, Milwaukee, Wis., was reported in the *Railway Age* of January 10, was born in Johnstown, Pa., in 1888 and studied mechanical engineering and metallurgy at the Carnegie Institute of Technology. In 1904 he went with the Cambria Steel Company at Johnstown, Pa., later holding positions with the Donner Steel Company, Buffalo, N. Y.; the American Tube & Stamping Co., the Bethlehem Steel Company and the Trumble Steel Company. In 1929 he went with the Keystone Steel & Wire Co., Peoria, Ill., as vice-president and general manager and in 1935 he resigned that position to become president of the Globe Steel Company at Milwaukee, Wis., which position he still holds. Mr. Buchanan was a director and a member of the executive committee of Allis-Chalmers at the time of his election as president.

OBITUARY

William Spencer Murray, consulting engineer who supervised the electrification of the New York, New Haven & Hartford and chairman of the board of the engineering firm of Murray & Flood, Inc., died January 9. He was 68 years of age.

C. E. Graham, who was in the general railway supply business on his own account in New York, died December 29. Mr. Graham began his railroad career as an office boy in the construction department of the Southern Pacific in San Francisco, Cal., and, in 1899, became executive secretary to H. E. Huntington, vice-president of that company. In 1901 he resigned from the Southern Pacific and transferred to New York as agent and attorney for Mr. Huntington in charge of his personal office and business affairs, and, in that capacity, was elected an officer of many industrial and railroad companies. In 1918 he was elected a vice-president of the Chesapeake & Ohio, becoming senior vice-president in 1920. He retired from this

position after the sale by Mr. Huntington of his Chesapeake & Ohio interests and, in 1926, entered the railway supply business on his own account.

Arthur Aigeltinger, vice-president of the American Brake Shoe & Foundry Co. in New York, whose death, December 30, was reported in the *Railway Age* of January 10, began his career in 1908 with the Manganese Steel Rail Company, holding successively the positions of chief engineer, vice-president and president. In 1918 he retired from this company to become vice-president of the American Malleables Company, of which he was president from 1922 until its dissolution in 1936. Meanwhile he had been appointed assistant to the president of the American Brake Shoe & Foundry, the parent company, in 1929, and was elected vice-president in 1934.

George Cook Kimball, a director and executive vice-president at Chicago of the United States Steel Corporation, a director and president of the Illinois Steel Company, and a director and executive vice-president of the Carnegie-Illinois Steel Corporation, with headquarters at Chicago,



Moffett Studio

George Cook Kimball

died on January 12 at the Passavant hospital in that city after an illness of about a year. Mr. Kimball was born at Newtonville, Mass., on October 13, 1879, and graduated from Harvard University in 1900. The following year he entered the steel industry in the engineering department of the American Tin Plate Company at Pittsburgh, Pa., and in 1905 he was appointed chief engineer of the American Sheet & Tin Plate Co. In 1931 he was elected a vice-president and in June, 1932, he was elected vice-president of the Illinois Steel Company, with headquarters at Chicago. When the Carnegie-Illinois Steel Corporation was formed in 1935, Mr. Kimball was made executive vice-president in charge of the Chicago district and in April, 1939, he was elected executive vice-president at Chicago of the United States Steel Corporation. Mr. Kimball was also a director of the Gary Land Company at the time of his death and during the first World War served as vice-chairman of the Pittsburgh chapter of the American Red Cross.

Financial

ATLANTIC & NORTH CAROLINA.—Loan. This company has asked the Interstate Commerce Commission to amend its order in Finance Docket No. 13315 wherein the railroad was recently authorized to borrow \$200,000 from the state of North Carolina, so as to now authorize it to borrow only \$30,000. The road now finds that it needs only \$30,000 instead of the \$200,000 originally authorized by the commission.

BOSTON & MAINE.—Operation.—This company has been authorized by Division 4 of the Interstate Commerce Commission to operate under trackage rights over a portion of a branch line of the Boston & Albany between Forest Lake, Mass., and Creamery, 10.5 miles.

CENTRAL OF GEORGIA.—Ratification of Co-Trustee.—Division 4 of the Interstate Commerce Commission has conditionally ratified the appointment of Merrel P. Callaway as substitute co-trustee of this company during reorganization proceedings under section 77 of the Bankruptcy Act. Since Mr. Callaway is at present vice president and head of the trust department of the Guaranty Trust Company of New York, Division 4 has approved his appointment as co-trustee on the condition that before the ratification shall become effective he shall show the court that the Guaranty Trust Company has resigned as trustee under the first mortgage of the railroad dated November 1, 1895.

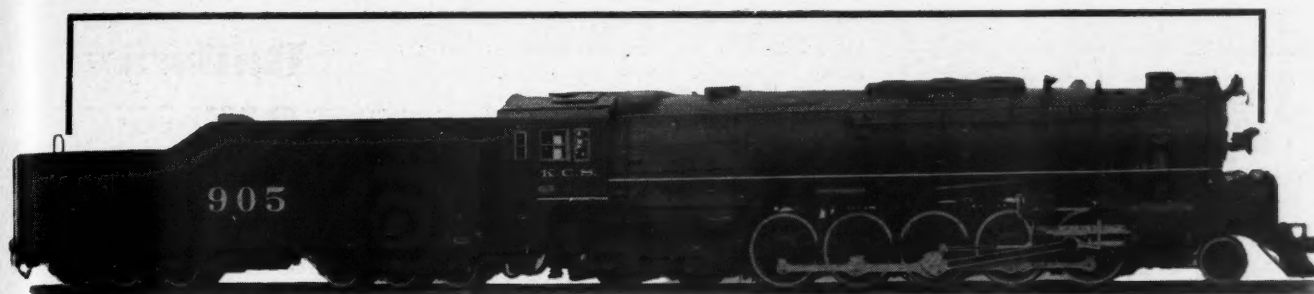
CHICAGO & NORTH WESTERN.—Abandonment.—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a portion of a branch line extending from Sycamore, Ill., northerly to Caledonia, 27.8 miles.

CHICAGO, ROCK ISLAND & PACIFIC.—Abandonment by the Choctaw, Oklahoma & Gulf.—The Choctaw, Oklahoma & Gulf, and the Chicago, Rock Island & Pacific, respectively, have been authorized by Division 4 of the Interstate Commerce Commission to abandon a line and the operation thereof, extending from Tecumseh Junction, Okla., in a southerly direction to Asher, 25.2 miles.

CHICAGO, SPRINGFIELD & ST. LOUIS.—New company authorized to buy and operate part of line.—On January 9 the Illinois Commerce Commission granted the Springfield & Southwestern Railroad Company a certificate authorizing it to acquire and operate that part of the line of the C. S. & S. L. 7.781 miles long, between Cox street in Springfield, Ill., to a point just south of Curran, Ill., and to operate upon the tracks of the Baltimore & Ohio in Madison street, Springfield.

For the property, the Springfield & Southwestern will issue to the Schiavone-Bonomo Corporation, which owns the 7.781 miles of line, its unsecured notes for \$55,000. The railroad also proposes to issue 50 shares of its common capital stock at \$100 a share to provide \$5,000 cash working capital. A previous certificate issued by the Commission to the

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Cylinders: { Dia. —27" • Driving Wheel Dia.—70" • Total Weight Engine & Tender Loaded—873,690 lbs. • Tender Loaded—359,690 lbs.

Boiler Pressure—310 lbs. • Weight on Drivers—353,300 lbs. • Tractive Power, Main Cylinders—93,300 lbs.

Lima Power

AT WORK ON THE KANSAS CITY SOUTHERN

In 1937 the Kansas City Southern placed in fast freight service ten 2-10-4 locomotives,

replacing mallet power on the heavier trains and two lighter locomotives on the fast through freight trains. The use of these locomotives to replace the heavier, mallet type of locomotive as well as the lighter type of freight locomotive, is a graphic example of the diversified uses of the modern super-power steam locomotive. It is the high availability of super-power locomotives coupled with low maintenance and

K.C.S.

high speeds that has prompted leading railroads throughout the country to replace

heavy or light locomotives with all-service super-power steam engines.

These locomotives are in daily service between Kansas City, Mo., and DeQueen, Ark., and have given excellent performance from the standpoint of meeting the fast schedules with good train load and at the same time, producing economy in fuel consumption as well as in maintenance.



LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO

Springfield Southern Railroad Company to acquire and operate the line was cancelled.

On May 21, 1941, operations were discontinued on 71.07 miles of the C. S. & S. L. south of Curran, and that portion of the line was sold and dismantled, leaving only the portion from Springfield to Curran still in operation.

DE KALB & WESTERN.—*New officers elected.*—Hal Overstreet has been elected chairman of the board; E. H. Jones, president; T. A. Stennis, executive vice-president; J. C. Warren, vice-president and L. P. Spinks, secretary and general counsel. D. P. White was re-elected treasurer and auditor.

LITCHFIELD & MADISON.—*Interest of the Atlas Corporation.*—Passing upon the application of the so-called Panama-Canal-Act provisions of the Interstate Commerce Act to the tie-up, Division 4 of the Interstate Commerce Commission has found that this company (an affiliate of the Atlas Corporation) does and may compete for traffic with the Mississippi Valley Barge Line Company; but that, so long as the respective operations of the railroad and the barge line remain as described in the record, continuance of interests of the Atlas Corporation and others in the barge line will not prevent that carrier by water from being operated in the interest of the public and with advantage to the convenience and commerce of the people, and will not exclude, prevent or reduce competition on its routes. As a result of the findings of Division 4, the interests of the Atlas and the L. & M. in the Mississippi Valley Barge Line are authorized, subject to further orders of the commission.

NEW YORK, SUSQUEHANNA & WESTERN.—*Acquisition.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to purchase from the Erie the railroad constituting the Edgewater section of the Erie Terminals, 1.5 miles, all in Bergen County, N. J. Details of the transaction were set out in the *Railway Age* of October 25, 1941, page 686.

NEW YORK, SUSQUEHANNA & WESTERN.—*Operation.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to operate under trackage rights (1) over the line of the New York, Ontario & Western between Riverside Junction, Pa., and Middletown, N. Y., 127.4 miles, and (2) over a line of the Middletown & Unionville between Middletown, N. Y., and Unionville, 14.3 miles. The commission's report states that this action is being taken "to forestall any possibility of the present agreement with the Erie being terminated and leaving the Winton branch without service of any kind."

NEW YORK, NEW HAVEN & HARTFORD.—*Equipment trust certificates.*—This road awarded a \$2,940,000 issue of equipment trust certificates to Halsey Stuart & Company on January 13 on a bid of 100.164 for 2½s, representing an interest cost basis to the carrier of 2.47. The certificates, dated February 1, 1942, mature in equal annual installments February 1, 1943 to 1952. They were reoffered publicly at prices to

yield 1 to 2.75 per cent, according to maturity. The buyers were the only bidders for the issue.

In June, 1941, this road received 11 bids on a \$2,890,000 issue and awarded it on an interest cost basis of 1.88.

READING.—*Abandonment by the Schuylkill Valley Navigation & Railroad.*—The Schuylkill Valley Navigation & Railroad and the Reading, respectively, have asked the Interstate Commerce Commission for authority to abandon 1,060 ft. of the Brockville branch in Schuylkill County, Pa., and the operation thereof.

SPRINGFIELD & SOUTHWESTERN.—*Securities.*—This newly-formed company has asked Interstate Commerce Commission authority to issue 50 shares of common capital stock of a par value of \$100 and 10 unsecured notes aggregating \$55,000. The notes will bear interest at the rate of five per cent, will mature on December 31 in each of the years from 1947 to 1951, inclusive, and the funds will be used to purchase rolling stock and equipment of the Chicago, Springfield & St. Louis in Springfield, Ill.

SOUTHERN.—*Abandonment.*—This company has asked Interstate Commerce Commission authority to abandon its Taylorsville branch extending from Statesville, N. C., northwest to Taylorsville, 20 miles.

SOUTHERN PACIFIC.—*Abandonment by the El Paso & Southwestern.*—The El Paso & Southwestern and the Southern Pacific, respectively, have been authorized by Division 4 of the Interstate Commerce Commission to abandon a line and the operation thereof, extending in a westerly direction from South Line Crossing, Ariz., to South Yard Junction, 4.2 miles.

TEXAS & PACIFIC.—*Abandonment.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon its Thurber branch extending from Mingus, Tex., to the end of the line at Thurber, 2.9 miles.

UNION PACIFIC.—*Abandonment by the Oregon Short Line.*—The Oregon Short Line and the Union Pacific, respectively, have asked the Interstate Commerce Commission for authority to abandon the Evona branch and the operation thereof extending from Mile Post 2.621 to Mile Post 3.779 where connection is made with the main line, 1.2 miles, all in Weber County, Utah.

Average Prices of Stocks and Bonds

	Jan. 13	Last week	Last year
Average price of 20 representative railway stocks...	28.99	28.05	30.96
Average price of 20 representative railway bonds...	65.74	64.30	64.20

Dividends Declared

Augusta & Savannah.—Year-End \$5.00, payable December 27 to holders of record December 22.
 Erie.—5 Per Cent Preferred A (irregular), \$5.00, payable December 30.
 Louisiana & Missouri.—7 Per Cent Guaranteed, \$3.50, payable December 29.
 Piedmont & Northern.—Extra, \$1.00, payable December 22 to holders of record December 10.
 Pittsburgh, Cincinnati, Chicago & St. Louis.—\$2.50, semi-annually, payable January 20 to holders of record January 10.

Railway Officers

EXECUTIVE

Karl W. Fischer, whose appointment as assistant to the president of the Burlington Lines, with headquarters at Chicago, was reported in the *Railway Age* of January 10, was born at Quincy, Ill., on June 18, 1883, and entered the service of the Burlington in 1909 as a timekeeper, serving in this position and as a tourist car conductor and city ticket agent until 1918. In that year, Mr. Fischer was ap-



Karl W. Fischer

pointed assistant trainmaster, which position he held until 1919, when he was advanced to trainmaster. Two years later he was appointed transportation inspector on the staff of the general manager, with headquarters at Chicago, and in 1924 he was transferred to Omaha, Neb. In 1925, Mr. Fischer was promoted to assistant superintendent of the LaCrosse division and five years later he was further advanced to superintendent of the Creston division, with headquarters at Creston, Iowa. In December, 1931, following a consolidation of divisions, Mr. Fischer was appointed assistant superintendent at Omaha, with jurisdiction over the Lincoln and Omaha divisions. On July 27, 1934, he was appointed superintendent of the relief and employment departments and chairman of the board of pensions, with headquarters at Chicago, and on May 16, 1935, he was promoted to land and tax commissioner. In June, 1940, Mr. Fischer was granted a leave of absence to serve in Washington, D. C., as deputy transportation commissioner of the Advisory Commission to the National Defense Council, which position he held until his recent appointment.

R. H. Smith, whose appointment as vice-president in charge of operation of the Norfolk & Western at Roanoke, Va., was reported in the *Railway Age* of January 3, was born at Baltimore, Md., on March 10, 1888. He received his civil engineering degree from Princeton University in 1911 and entered railroad service in 1910 as chairman in the engineering department of

Continued on next left-hand page

STEAM LOCOMOTIVES

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THE introduction of the Franklin System of Steam Distribution has brought about an entirely new concept of steam locomotive design and operation. Through its application it is possible to obtain productive use of the 33⅓% latent power that has heretofore been locked-up in the boiler because of the limitations of the conventional valve and valve gear. The full utilization of the available steam has made possible the design of smaller, more compact locomotives that are equal in train load-speed capacity to existing locomotives. Because of the reductions made possible in the size and weight of new locomotives incorporating The Franklin System of Steam Distribution maintenance problems of both locomotive and track will be greatly reduced.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK
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the Norfolk & Western, serving during summer months. From 1911 to 1913 Mr. Smith served as masonry inspector and



R. H. Smith

transitman. In 1913 he became assistant roadmaster and in 1914 he was promoted to roadmaster at Pulaski, Va., being transferred to Roanoke, in 1916. Mr. Smith became assistant division superintendent at Bluefield, W. Va., in 1917 and in 1919 he was transferred to Roanoke. He was promoted to division superintendent in 1922 and in 1931 he became general superintendent. Mr. Smith was appointed general manager in 1936 and in 1939 he became vice-president and general manager, which positions he held at the time of his recent appointment.

H. C. Yancey, publicity agent of the Southern at Atlanta, Ga., has been appointed executive representative at Washington, D. C. Mr. Yancey and C. M. Kimball, also executive representative, will report to Holcombe Parkes, assistant to the president.

John Purcell, whose retirement on January 1 as assistant to the operating vice-president (mechanical) of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was reported in the *Railway Age* of January 3, was born at St. Charles, Mo., on January 19, 1870, and entered railroad



John Purcell

service on October 3, 1884, as a machinist apprentice on the Santa Fe. He was advanced to gang foreman in 1887, and then

served in various positions until 1898 when he was appointed master mechanic at Argentine, Kan. He was later transferred to Shopton, Iowa, and in April, 1902, he was promoted to superintendent of the Topeka shops. In May, 1912, he was further advanced to assistant to the operating vice-president (mechanical), with headquarters at Chicago, continuing in that position until his retirement, except during the period of federal control, when he was assistant to the federal manager of the Santa Fe. Mr. Purcell is a life member of the Mechanical division of the Association of American Railroads. He served as chairman of that division in 1923 and 1924 and has been a member of its General committee since 1920 and of its Committee on Research since 1933. He also served from 1914 to 1919 as a member of the Executive committee of the former American Railway Master Mechanics' Association, as a member of the Committee on Standards for Locomotives and Cars of the U. S. Railroad Administration in 1918 and as a member of the Mechanical Advisory committee under the Federal Co-ordinator of Transportation in 1934.

FINANCIAL, LEGAL AND ACCOUNTING

Curtis Wraxle Brown, Jr., whose election as secretary and assistant treas-



Conway Studios

C. W. Brown, Jr.

urer of the Virginian at New York was reported in the *Railway Age* of January 10, was born in December, 1898, in Roane county, Tenn. Mr. Brown was educated at Maryville (Tenn.) College and served in the U. S. Navy in the first World War. He entered the service of the Virginian in 1919 as clerk at Norfolk, Va., and later served in various capacities, including general bookkeeper and general accountant. On July 1, 1941, Mr. Brown was appointed assistant to secretary and treasurer at New York, the position he held until his election as secretary and assistant treasurer, effective January 1.

Charles Howard Anderson whose promotion to commissioner of taxes and manager of insurance of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was reported in the *Railway Age* of January 3, was born in Chicago and at-

tended Gregg Business College. He entered railway service in 1903 in the office of the president of the Santa Fe as a



Charles Howard Anderson

general clerk, handling tax, insurance and employee pension matters. Later, while carrying on railroad work, he took a law course at Kent College of Law and was admitted to the Illinois Bar in 1921. In 1920 Mr. Anderson was appointed tax agent, with headquarters at Chicago, which position he held until his recent promotion.

F. G. Devlin has been appointed paymaster of the Great Northern, with headquarters at St. Paul, Minn.

J. W. Whowell, assistant to the auditor of receipts of the Pullman Company, has been promoted to auditor of receipts, succeeding **A. H. Brooks**, who died on November 19.

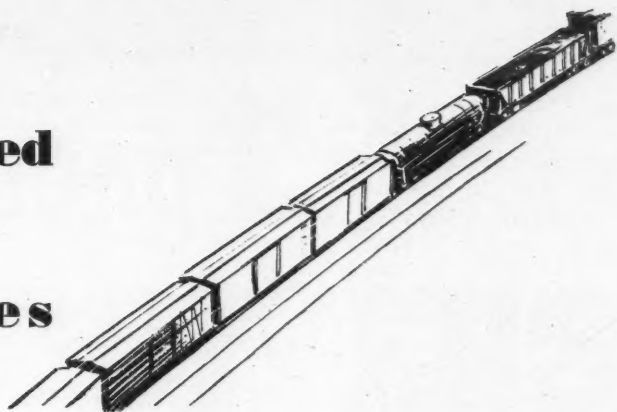
George D. Van Huss has been appointed freight claim agent of the Grand Trunk Western, with headquarters at Detroit, Mich., succeeding **L. R. Flanders**, who retired on January 1.

Gerald E. Dwyer has been appointed assistant general attorney of the New York Central and **Clyde Brown, Jr.**, and **Charles R. Hulsart, Jr.**, have been appointed assistants to general attorney, with headquarters at New York.

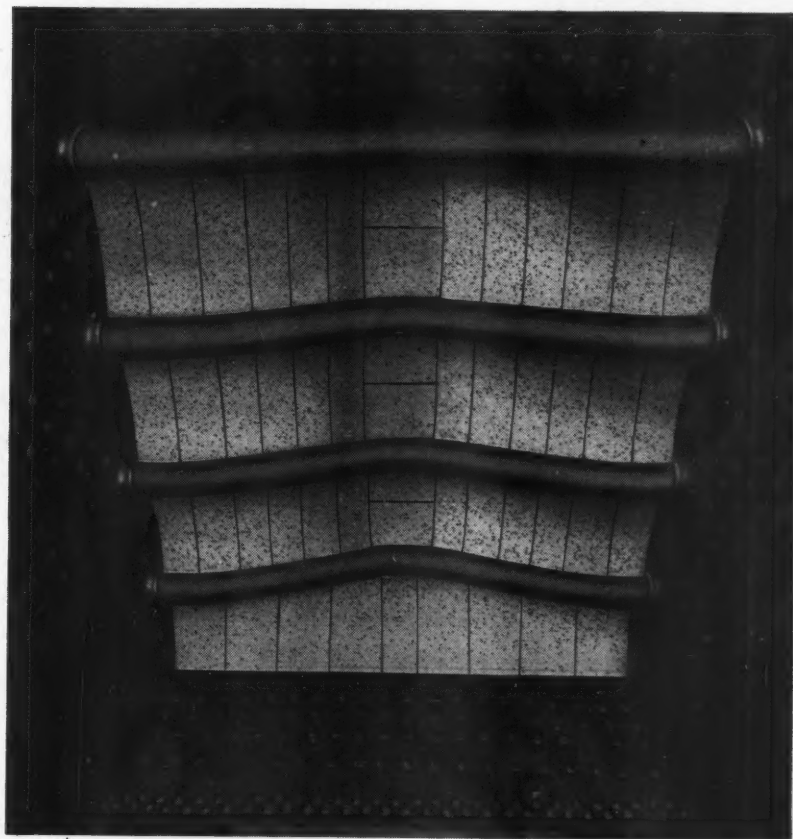
J. B. Tuggle, assistant auditor of the Virginian, has been appointed assistant secretary and assistant treasurer, with headquarters as before at Norfolk, Va., succeeding **H. Clement**, who has retired in accordance with the pension rules, after 35 years of service with this road.

Ivins A. Browne, secretary, treasurer and director of the Virginian, with headquarters at New York, retired from active duty on January 1, after many years of service. Mr. Browne was born at Quincy, Ill., on November 17, 1870, and entered railroad service as a clerk with the Philadelphia & Erie (Pennsylvania) on May 1, 1887, subsequently becoming station agent. Mr. Browne then served for three and one-half years as clerk in the general superintendent's office of the Rochester & Pittsburgh (Baltimore & Ohio). For six years he was a clerk in the shipping department of the Philadelphia & Reading (now Read-

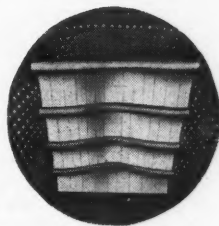
THE HARDER **The Locomotive Is Worked** **THE MORE** **The Arch Brick Saves**



When locomotive runs were short and train speeds slow, the Security Arch showed substantial fuel savings . . . With modern operation, involving long runs at high speeds, the Security Arch shows a greater economy . . . Today the Security Arch costs less per 1,000 ton miles and is a more important fuel saving factor than it was when the service was less severe.



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ing). Mr. Browne entered the service of the Virginian in 1906, serving successively as assistant to treasurer and secretary and treasurer.

Willis T. Pierson, general attorney on the Erie, has been promoted to assistant general counsel, with headquarters as before at Cleveland, Ohio, and **Montgomery C. Smith, Jr.**, assistant general attorney, has been promoted to general attorney, succeeding Mr. Pierson. Mr. Pierson was born at Clinton, Iowa, on September 13, 1893, and graduated in law from the University of Michigan in 1916. He entered railway service on May 28, 1917, as a tax clerk in the land and tax department of the Erie at Cleveland and on September 15, 1917, he was promoted to chief clerk of that department. On January 15, 1918, he was appointed a special agent for the land and tax department and five months later he was promoted to assistant land and tax agent at Cleveland. From June 25, 1918, to February 15, 1919, Mr. Pierson served in the U. S. Army and on April 7, 1919, he returned to the Erie as chief land appraiser in the valuation department at New York. On July 1, 1928, he was promoted to valuation and commerce attorney, with headquarters at New York, and on July 16, 1937, he was advanced to general attorney, with headquarters at Cleveland, which position he held until his recent promotion.

OPERATING

W. P. Bristow has been appointed district superintendent for the Pullman Company at Cincinnati, Ohio.

J. H. Leary has been appointed assistant to the general manager on the Western Pacific, with headquarters at San Francisco, Cal.

W. L. Ferrick, assistant superintendent on the Missouri Pacific at Dupon, Ill., retired on December 15 after 54 years of railroad service.

Newton L. Greer, a trainmaster on the Great Northern, has been promoted to superintendent of the Dakota division, with headquarters at Grand Forks, N. D., succeeding **Peter J. Coliton**, deceased.

E. T. F. Wohlenberg has been appointed general manager of the Oregon & Northwestern, with headquarters at Hines, Ore., succeeding to the duties of **C. J. Pettibone**, vice-president, who has resigned.

R. M. Stone has been appointed superintendent of telegraph of the St. Louis Southwestern, with headquarters at Tyler, Tex., succeeding **W. J. Allen**, whose death on November 27 was reported in the *Railway Age* of December 13.

J. L. Sugden, superintendent of sleeping, dining, parlor car and news service on the Canadian Pacific at Vancouver, B. C., has been promoted to general superintendent of sleeping, dining, parlor car and news service for the Western lines, with headquarters at Winnipeg, Man., succeeding **S. Wertheim**, who retired from active service on December 31. **John Stewart**,

assistant superintendent of sleeping, dining, parlor car and news service at Winnipeg, has been promoted to superintendent at Vancouver, relieving Mr. Sugden.

F. L. Aitcheson, assistant to general superintendent of the Florida East Coast, with headquarters at St. Augustine, Fla., has been promoted to assistant general superintendent, with the same headquarters. The position of assistant to general superintendent has been abolished.

F. L. Hanlon, supervisor of wage and working agreements of the Delaware & Hudson, has been appointed assistant to general manager (personnel), with headquarters at Albany, N. Y., succeeding **W. W. Bates**, who retired on January 1 at his own request, after many years of service with this road.

J. P. Jackson, whose promotion to general superintendent of the Eastern general division of the Norfolk & Western at Roanoke, Va., was reported in the *Railway Age* of January 3, was born on October 22, 1902, at Austinville, Va. Mr.



J. P. Jackson

Jackson received his B. S. in C. E. degree in 1924 from Virginia Polytechnic Institute. He entered railroad service on June 16, 1924, as rodman in the engineering department of the Norfolk & Western and served successively as inspector, levelman and transitman in that department. On October 7, 1929, he was appointed assistant roadmaster of the Radford division, becoming acting roadmaster of the Norfolk division on November 1, 1933, and roadmaster of that division on October 1, 1934. On October 1, 1935, Mr. Jackson became assistant superintendent of the Shenandoah division, being transferred to the Scioto division on March 1, 1938. He was promoted to superintendent of the Shenandoah division on April 1, 1939, being transferred to the Scioto division on June 1, 1939, and to the Pocahontas division at Bluefield, W. Va., on January 1, 1940, the position he held until his recent promotion.

J. R. Talbott, whose promotion to general superintendent of transportation of the Norfolk & Western at Roanoke, Va., was reported in the *Railway Age* of January 3, was born at Ashland, Ky., on August 24, 1874. Mr. Talbott entered the service of the Norfolk & Western in May, 1890, as a

yard and station clerk at Coal Grove, Ohio. In June, 1892, he was transferred to Columbus, Ohio, as clerk in the car



J. R. Talbott

record office, and later in the year, was transferred to Roanoke. In April, 1899, Mr. Talbott was promoted to traveling car agent and four years later he was appointed car accountant, with headquarters at Roanoke. On July 1, 1917, he was appointed superintendent of car service and on August 1, 1926, he became superintendent of transportation, the position he held until his recent promotion, effective January 1.

H. M. Kimble, assistant trainmaster on the Philadelphia division of the Pennsylvania, has been promoted to trainmaster-division operator on the Erie and Ash-tabula division, with headquarters at New Castle, Pa., succeeding **L. G. Jamison**, who has been appointed night freight trainmaster on the New York division.

K. V. Conrad, whose promotion to superintendent of transportation of the Norfolk & Western at Roanoke, Va., was reported in the *Railway Age* of January 3, entered the service of the Norfolk & Western as a messenger at Roanoke on February 1, 1903. He held various clerical positions in the office of the superintendent of transportation until June, 1918, when he



K. V. Conrad

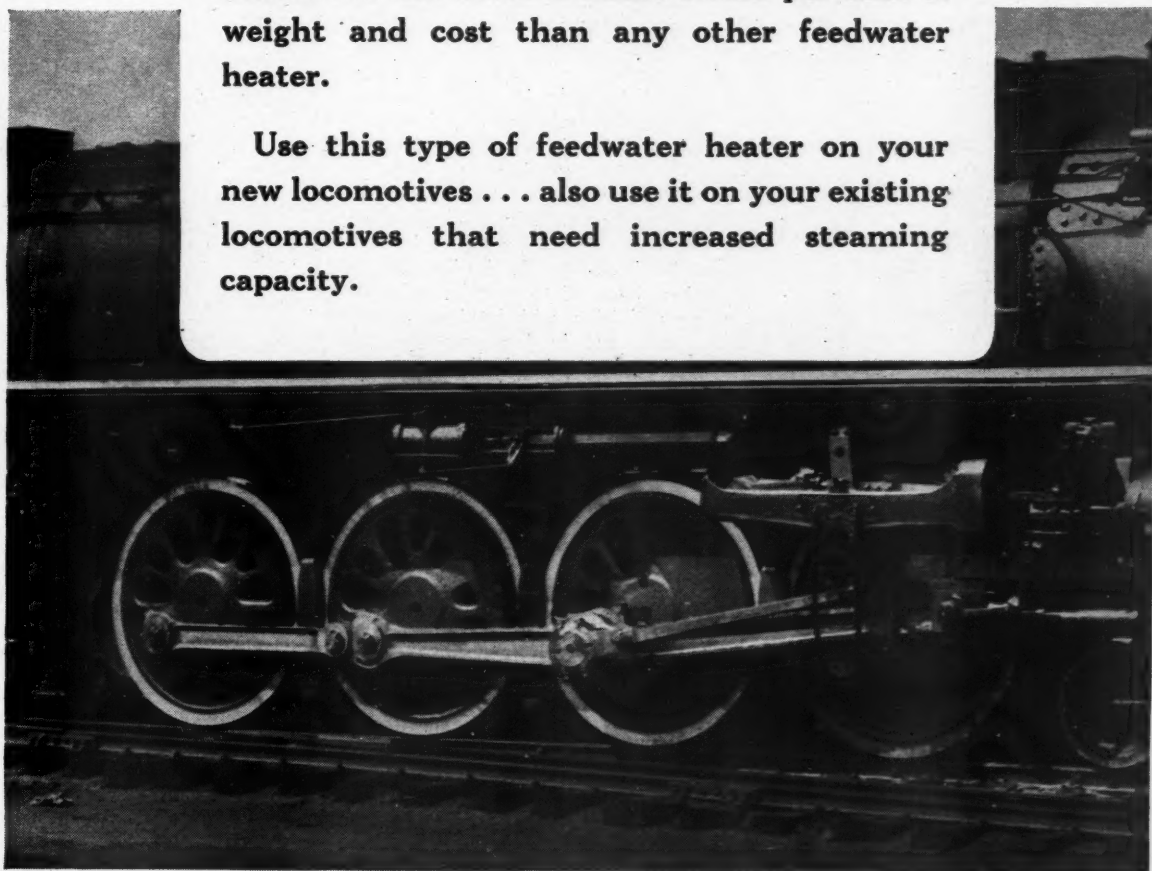
was appointed chief clerk to the transportation assistant to the regional director, United States Railroad Administration.

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Two years later, Mr. Conrad was appointed chief clerk to the general superintendent of transportation and served in that capacity until June 1, 1931, when he was appointed assistant superintendent of transportation, the position he held until his recent promotion.

Thomas F. Dixon, superintendent of the Butte division of the Great Northern, with headquarters at Great Falls, Mont., has been promoted to general manager of lines west, with headquarters at Seattle, Wash., succeeding **Roy A. McCandless**, who has been appointed superintendent of the Klamath division, with headquarters at Klamath Falls, Ore., replacing **John M. Budd**, who has been transferred to the Kalispell division at Whitefish, Mont. Mr. Budd relieves **Ira E. Manion**, who, in turn, has been transferred to Great Falls, succeeding Mr. Dixon.

Mr. Dixon entered the service of the Great Northern in 1900 at Superior, Wis.,



Thomas F. Dixon

serving in the operating department in various positions at Superior, Seattle, Wash., and Spokane. In the spring of 1927, he was promoted to assistant superintendent at Whitefish and on May 1, 1928, he was advanced to superintendent of the Klamath division, with headquarters at Klamath Falls. In August, 1930, he was transferred to the Montana division, with headquarters at Havre, Mont., and in October, 1931, he returned to the Klamath division. Mr. Dixon was transferred to the Butte division, with headquarters at Great Falls, in September, 1933, which position he held until his recent promotion.

L. H. Meredith, superintendent car service of the Western Maryland, has been appointed superintendent transportation, with headquarters as before at Hagerstown, Md., succeeding **C. M. Connor**, deceased. **E. S. Garver** has been appointed assistant to superintendent transportation, with headquarters at Hagerstown. The position of superintendent car service has been abolished.

J. A. Nichols, trainmaster on the New York Central (Big Four) at Kankakee, Ill., has been promoted to assistant superintendent at Indianapolis, Ind., succeeding **G. W. Sears**, who has been appointed trainmaster at Mattoon, Ill., replacing **F. E. Johnson**, deceased. **W. G. Chase**, as-

sistant trainmaster at Terre Haute, Ind., has been advanced to trainmaster at Petersburg, Ind., relieving **F. F. McNamee**, who has been transferred to Kankakee, succeeding Mr. Nichols.

E. E. Foulks, assistant superintendent of the Albuquerque division of the Atchison, Topeka & Santa Fe, with headquarters at Winslow, Ariz., has been promoted to superintendent of that division, with the same headquarters, succeeding **E. B. Hebert**, who has been transferred to the Valley division, with headquarters at Fresno, Cal., succeeding **George W. Simpson**, who retired on January 1. **Noah Bridges**, roadmaster on the Middle division at Newton, Kan., has been advanced to assistant superintendent at Winslow, relieving Mr. Foulks. **A. J. Smith**, chief dispatcher of the Panhandle division at Wellington, Kan., has been promoted to trainmaster at Needles, Ariz., replacing **Neil Wilson**, who has been transferred to Fresno.

Mr. Simpson was born at Plano, Tex., on August 7, 1871, and entered railway service in 1893 as a brakeman on the Nevada Southern (now part of the Santa Fe). The following year he became a clerk on the Kansas & Colorado (now also part of the Santa Fe) and in December of the same year he went with the Coast lines of the Santa Fe as a brakeman. Mr. Simpson was subsequently promoted to conductor, ticket inspector and general inspector of transportation. In 1909 he was advanced to trainmaster at Fresno and in 1926 he was promoted to assistant superintendent of the Valley division, with the same headquarters. In April, 1928, he was further advanced to superintendent of the Arizona division, with headquarters at Needles, Cal., and in January, 1934, he was transferred to the Valley division, with headquarters at Fresno, which position he held until his retirement.

TRAFFIC

C. H. Hart has been appointed southwestern passenger agent for the Baltimore & Ohio at Dallas, Tex.

E. M. Johns has been appointed general agent, freight department, on the New York Central at Toledo, Ohio.

Ralph A. Jackson, industrial agent on the Southern, has been appointed general industrial agent, with headquarters at Washington, D. C.

K. D. McKenzie, acting general livestock agent of the Chicago, Rock Island & Pacific at Kansas City, Mo., has been promoted to general livestock agent, with the same headquarters.

T. J. Connell, division passenger agent for the Southern at Cincinnati, Ohio, has been appointed assistant general passenger agent, with the same headquarters, a change of title.

James Selwyn Branch, whose appointment as general freight and passenger agent of the Virginian at Norfolk, Va., was reported in the *Railway Age* of January 10, was born at Edenton, N. C., on January 22, 1904. He began his career in

1921 as secretary to the Director of Public Safety, Norfolk, Va., which position he held until November 15, 1924, when he entered railroad service with the Virginian as secretary to traffic manager at Norfolk. On January 1, 1930, Mr. Branch was appointed traveling freight agent and on April 16, 1932, he became commercial agent. He was promoted to general freight agent on August 1, 1936, the position he held until his recent appointment.

Brooks H. Stanage, freight traffic manager of the St. Louis-San Francisco, has been promoted to assistant chief traffic officer, with headquarters as before at St. Louis, Mo. **Andrew L. Kreamelmeyer**, assistant to the general traffic manager, has been advanced to assistant to the chief traffic officer. **J. M. Strupper** and **J. E. Payne**, assistant freight traffic managers at St. Louis, and **T. H. Banister**, traffic manager at Birmingham, Ala., have been promoted to freight traffic managers, with headquarters at St. Louis. **Carl H. Gray**, general agent at Pittsburgh, Pa., has been advanced to traffic manager at Birmingham, succeeding Mr. Banister and **D. E. McKeithen**, general agent at Jacksonville, Fla., has been transferred to Pitts-



Andrew L. Kreamelmeyer

burgh, replacing Mr. Gray. **V. H. Biedermann**, traveling freight agent at Dallas, Tex., has been promoted to general agent at Jacksonville, relieving Mr. McKeithen.

Mr. Kreamelmeyer was born on a farm near Steelville, Mo., on April 7, 1904, and attended Jones Commercial College, St. Louis, Mo. He entered railway service on December 1, 1921, as a stenographer in the legal department at St. Louis, and in 1923, he was promoted to secretary to the general attorney and commerce counsel. On October 1, 1927, he was appointed secretary to the vice-president in charge of traffic, and on August 1, 1931, he was advanced to chief clerk to the general traffic manager. Mr. Kreamelmeyer was promoted to assistant to the general traffic manager on December 1, 1934, and in October, 1938, he was appointed general freight agent, with headquarters as before at St. Louis. On October 1, 1940, he was reappointed assistant to the general traffic manager, which position he held until his recent promotion.

James Frank Smith, whose promotion to general freight agent of the Virginian at

Norfolk, Va., was reported in the *Railway Age* of January 10, was born on May 22, 1900, at Churchland, Va. Mr. Smith was educated in the schools of Norfolk and entered railroad service on September 6, 1915, with the Norfolk & Western in the general agent's office at Norfolk. On August 29, 1917, Mr. Smith went with the Virginian as tariff file clerk in the traffic department and was appointed rate clerk on December 1, 1917. He became chief clerk of the traffic department on November 1, 1924 and was promoted to assistant general freight agent on May 15, 1935, the position he held until his recent promotion.

A. F. Stovall, assistant general freight and passenger agent of the Prescott & Northwestern, has been advanced to general freight and passenger agent, with headquarters as before at Prescott, Ark., a change of title.

D. F. Carpenter has been appointed superintendent mail and express traffic of the Reading and Central of New Jersey, with headquarters at Jersey City, N. J., succeeding **J. P. Connolly**, who has been retired after 33 years of service.

E. T. Anderson has been appointed freight traffic agent of the Atlanta, Birmingham & Coast, with headquarters at Atlanta, Ga., succeeding **A. E. Brantley**, who has been inducted into military service.

R. E. Taylor, assistant traffic manager of the Nevada Northern and traffic manager of the Bingham & Garfield, has been promoted to traffic manager of the Nevada Northern, with headquarters as before at San Francisco, Cal., a change of title.

Gilbert J. White, soliciting freight and passenger agent on the Missouri-Kansas-Texas at Dallas, Tex., has been promoted to division freight agent at Kansas City, Mo., succeeding **W. P. Lacy**, who has been granted a leave of absence for service in the Ordnance Reserve Corps.

W. L. English, assistant to the chief traffic officer of the St. Louis-San Francisco and general manager of the Frisco Transportation Company (motor transport subsidiary), with headquarters at Springfield, Mo., has been appointed supervisor of motor transportation of the Frisco, with the same headquarters.

C. N. Packard, Jr., division freight agent on the Chicago, Rock Island & Pacific at Lincoln, Neb., has been promoted to general agent at Pittsburgh, Pa., succeeding **George F. Ramspacher**, deceased. **W. H. Weik**, traveling freight and passenger agent at Cleveland, Ohio, has been advanced to district passenger agent at Peoria, Ill., a newly created position.

A. F. Schafhirt, whose promotion to assistant freight traffic manager, rates and divisions, of the Virginian at Norfolk, Va., was reported in the *Railway Age* of January 10, was born at Greencastle, Pa., on January 6, 1886. He entered railroad service on January 1, 1905, as stenographer in the traffic department of the Norfolk &

Western at Roanoke, becoming rate clerk in the general freight office in March, 1908. Mr. Schafhirt went with the Virginian on September 1, 1908, as rate clerk in the general freight office at Norfolk, becoming chief clerk there on October 1, 1916. He was appointed assistant general freight agent at Norfolk on January 1, 1922, and general freight agent on May 15, 1935, the position he held until his recent promotion.

ENGINEERING AND SIGNALING

Herbert R. Clarke, whose promotion to chief engineer maintenance of way of the Burlington Lines, with headquarters at Chicago, was reported in the *Railway Age* of January 10, was born in Ireland on November 15, 1882. He came to America with his parents in 1888 and graduated



Herbert R. Clarke

from Monmouth College, Monmouth, Ill., in 1906. He entered railroad service in 1906 as a chainman on the Missouri Pacific, later being promoted to rodman. In 1907 he went with the Chicago, Burlington & Quincy as a rodman, later being advanced to instrumentman and extra gang foreman. In July, 1909, he was appointed resident engineer on the construction of a line from Herrin, Ill., to Paducah, Ky., and in May, 1911, he was promoted to roadmaster on the Aurora division. Mr. Clarke was advanced to general roadmaster of the McCook division in November, 1919, and in October, 1921, he was promoted to district engineer of maintenance for the Lines West of the Missouri river, with headquarters at Lincoln, Neb. In January, 1925, he was advanced to general inspector of permanent way and structures for the system, with headquarters at Chicago, and in 1927 his jurisdiction was extended to include the Colorado & Southern. In 1931 Mr. Clarke was promoted to engineer maintenance of way of the Burlington Lines (which include the C. B. & Q., the C. & S., the Ft. Worth & Denver City and the Wichita Valley), which position he has held until his recent promotion.

F. H. Lovell, designing engineer of the Central region of the Pennsylvania, has been appointed assistant engineer of bridges and buildings, with headquarters at Pittsburgh, Pa., succeeding **J. P. Wal-**

ton, who has been promoted to engineer of bridges and buildings for the Western region at Chicago.

M. C. Bitner, assistant division engineer of the New York division of the Pennsylvania, has been promoted to division engineer of the Erie and Ashtabula division.

T. B. Coolidge has been appointed supervisor of bridges and buildings of the New York Central, line west of Buffalo, with headquarters at Erie, Pa. **A. N. Page** has been appointed assistant supervisor of bridges and buildings at Erie.

F. L. Riddle, engineer maintenance of way of the Pittsburgh & West Virginia, has been promoted to chief engineer, a newly created position, with headquarters as before at Pittsburgh, Pa., and **J. C. Cruikshank**, division engineer, has been advanced to engineer-maintenance of way.

W. F. Clayman, supervisor of bridges of the Erie division of the New York Central, with headquarters at Ashtabula, Ohio, has been appointed assistant supervisor of bridges and buildings, with the same headquarters. The position of supervisor of bridges has been abolished.

MECHANICAL

J. E. Goodwin, whose promotion to mechanical superintendent of the Southern district of the Missouri Pacific, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of January 3, entered railway service as a machinist's apprentice with the Atchison, Topeka & Santa Fe in 1917, and after completing his apprenticeship, resigned to enter college, studying engineering at Wake Forest College and the University of Chicago. He re-entered railroad service in 1925 as a machinist on the Missouri Pacific at Hoisington, Kan., and the following year he was promoted to roundhouse foreman. In 1929 he was appointed foreman of the backshop at Little Rock, Ark., later serving as acting super-



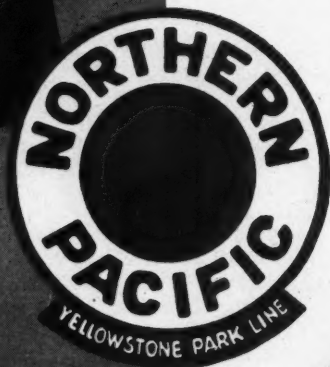
J. E. Goodwin

intendent for a short time and then general foreman. On January 28, 1941, Mr. Goodwin was advanced to master mechanic of the Palestine and San Antonio division of the International-Great Northern (part of the Missouri Pacific system), with headquarters at San Antonio, Tex.,

MORE *high speed*



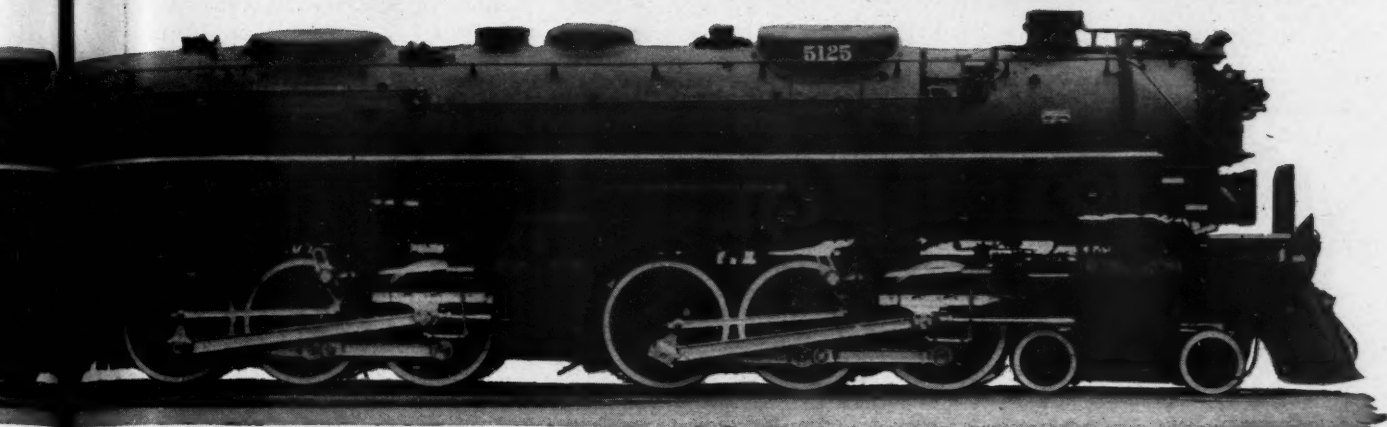
Alco



on the "Main"



freight **POWER**



"Main Street of the Northwest"

SIX new 4-6-6-4 type single-expansion articulated high-speed freight locomotives have been added to strengthen and speed up the service on the Northern Pacific — "The Main Street of the Northwest." These new locomotives are almost duplicates of the twelve 4-6-6-4's built by the American Locomotive Company and delivered to the Northern Pacific late in 1936.

These modern high-speed, high-powered freight locomotives are handling freight trains at what, only a few years back, would have been considered very good fast passenger train schedules. Overall the new power provides a far better operating ratio for the railroad, and faster and more efficient service to shippers.

NORTHERN PACIFIC 4-6-6-4 TYPE LOCOMOTIVE CHARACTERISTICS

Weight on Drivers.....	444,000 lb.
Weight of Engine.....	643,000 lb.
Cylinders (Four).....	23x32 inches
Diameter of Drivers.....	70 inches
Boiler Pressure.....	260 lb.
Tractive Power.....	106,900 lb.
Tender Capacity — Fuel.....	27 Tons
Water.....	25,000 Gals.

AMERICAN LOCOMOTIVE COMPANY
30 CHURCH STREET
NEW YORK, N. Y.

the position he held until his recent promotion. Mr. Goodwin is first vice-president and secretary-treasurer of the Locomotive Maintenance Officers Association.

Howard Hill, whose promotion to assistant superintendent of motive power and rolling equipment of the Reading at Reading, Pa., was reported in the *Railway Age*



Howard Hill

of January 10, was born at Philadelphia, Pa., on June 15, 1890. He entered the service of the Reading as machinist in 1914 at Philadelphia, being promoted to assistant foreman in 1917. On January 1, 1933, Mr. Hill was promoted to foreman enginehouse at Philadelphia, and on September 1, 1936, he became assistant master mechanic. On July 1, 1938, he was promoted to master mechanic of the Philadelphia division, which position he held until his recent promotion.

George H. Massey, whose promotion to assistant superintendent of motive power and rolling equipment of the Central of New Jersey at Elizabethport, N. J., was reported in the *Railway Age* of January 10, was born at Jamaica, British West Indies, on April 25, 1889. He entered the service of the Central of New Jersey as helper apprentice on March 25, 1908, and was promoted to machinist in 1910. In



George H. Massey

1916 he was promoted to assistant foreman, Bayonne (N. J.) enginehouse. On August 1, 1925, he was promoted to enginehouse foreman at Elizabethport engine

terminal and on March 17, 1926, he became general mechanical inspector, New York. On March 1, 1929, he was promoted to assistant master mechanic at Communipaw (N. J.) engine terminal, and on January 1, 1933, he became division master mechanic in charge of the Central and Southern sub-divisions, which position he held until his recent promotion.

M. H. Losch has been appointed master mechanic of the Illinois and Missouri divisions and the Dupo terminals of the Missouri Pacific and of the Missouri-Illinois Railroad, with headquarters at Dupo, Ill., succeeding **W. G. Wilson**, transferred.

R. C. Hempstead, district master mechanic of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Milwaukee, Wis., has been promoted to assistant superintendent of motive power, with the same headquarters, succeeding **Paul L. Mullen**, whose death on January 5 is reported elsewhere in these columns. **Alec M. Martinson**, division master mechanic at La Crosse, Wis., has been promoted to district master mechanic at Milwaukee, relieving Mr. Hempstead, and **F. L. King**, roundhouse foreman at Milwaukee, has been advanced to division master mechanic at La Crosse, replacing Mr. Martinson.

PURCHASES AND STORES

C. J. Pearce, district material supervisor on the Southern Pacific at El Paso, Tex., has been promoted to assistant general storekeeper, with the same headquarters, succeeding **H. J. Smith**, who has been transferred to Sacramento, Cal. Mr. Pearce entered railway service in June, 1912, as an extra gang timekeeper on the Minneapolis, St. Paul & Sault Ste. Marie at Minneapolis, Minn., later serving as a clerk in the accounting offices at that point. In October, 1913, he was appointed trainmen's timekeeper at Enderlin, N. D., and in April, 1917, he enlisted in the U. S. Army, serving overseas in France. On May 6, 1920, he went with the Southern Pacific as a tracer clerk in the general stores at West Oakland and on June 16, 1921, he was promoted to storekeeper at Tracy, Cal. Mr. Pearce was later appointed, successively, chief clerk to the assistant purchasing agent at Portland, Ore., and assistant division storekeeper at Portland. On June 1, 1925, he was advanced to division storekeeper at Dunsmuir, Cal., and on May 1, 1931, he was transferred to Oakland Pier, Cal. Mr. Pearce was appointed general foreman of the West Oakland general stores on October 1, 1932, and on June 16, 1935, he was appointed district material supervisor at El Paso, which position he held until his recent promotion.

SPECIAL

Dr. Ray S. Westline has been appointed chief surgeon of the Chicago & Eastern Illinois, with headquarters at Chicago, succeeding **Dr. John G. Frost**, whose death on January 2 was reported in the *Railway Age* of January 10. **Dr. E. L. Arensdorf** has been appointed assistant chief surgeon.

OBITUARY

Robert S. Mitchell, chief special agent of the Missouri Pacific Lines, with headquarters at St. Louis, Mo., died on January 11.

A. E. McGowan, assistant general freight agent on the Atchison, Topeka & Santa Fe at Los Angeles, Cal., died suddenly of a heart attack in that city on January 7.

Wilbur K. Hammond, vice-president, assistant secretary and assistant treasurer of the Missouri-Kansas Texas, with headquarters at New York, died on January 12 of a heart attack at his home in West Nyack, N. Y., at the age of 56. Mr. Hammond was born at New York on June 2, 1885, and entered the service of the Missouri-Kansas-Texas in October, 1900, as clerk. He served successively as stenographer, secretary to vice-president, secretary to chairman and president, chief clerk, assistant cashier and cashier from March, 1902, to April, 1927, when he became assistant secretary and cashier. In October, 1936, Mr. Hammond was appointed vice-president, assistant secretary and assistant treasurer, which position he held until his death.

John E. Horrigan, who retired on May 1, 1931, as superintendent of motive power of the Elgin, Joliet & Eastern, with headquarters at Joliet, Ill., died on January 8 at his home in that city. Mr. Horrigan was born at Mendota, Ill., on June 23, 1860, and entered railroad service in 1877 as a machinist apprentice on the Iowa Central (now part of the Minneapolis & St. Louis). Later he was advanced successively to machinist, roundhouse foreman, and master mechanic at Keithsburg, Ill. On May 1, 1893, he went with the Chicago, Rock Island & Pacific as roundhouse foreman at Blue Island, Ill., and the following year he was appointed master mechanic on the E. J. & E. at Joliet. Mr. Horrigan was promoted to superintendent of motive power on May 15, 1899, which position he held until his retirement.

Paul L. Mullen, assistant superintendent of motive power of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Milwaukee, Wis., died suddenly in that city on January 5. Mr. Mullen was born at Indianola, Iowa, on February 13, 1886, and entered railway service in 1902 as a call boy on the Milwaukee at Perry, Iowa, later serving as a machinist apprentice at Perry and Dubuque, Iowa. In 1906 he was promoted to machinist at Perry and in 1907 he was advanced to assistant roundhouse foreman. From 1909 to 1916 he served as roundhouse foreman at Council Bluffs, Iowa, Ottumwa, Perry and Savanna, Ill., and in the latter year he was promoted to assistant general foreman at Sioux City, Iowa. Mr. Mullen was promoted to master mechanic at Austin, Minn., in 1918 and in 1920 he was transferred to Savanna. He was advanced to assistant superintendent of motive power, with headquarters at Milwaukee on September 1, 1941.



LEAKY valves and Cylinders are in the same category as 5th Columnists — they waste fuel and power — two important essentials in this national emergency.

Now is a good time to make sure that the valves and cylinders of your locomotives are equipped with Bushings, Bull Rings and Packing Rings made from HUNT-SPILLER *Air Furnace* GUN IRON.

The Wear-resisting properties of this material will insure pressure tight performance for maximum periods between renewals — thus contributing to the conservation of materials as well as fuel — and, of course, to the economy of operation.



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Freight Operating Statistics of Large Steam Railways—Selected Items

Region, road, and year	Miles of road operated	Train-miles	Locomotive-miles		Car-miles		Ton-miles (thousands)		Number of road locomotives on line				
			Principal and helper	Light	Loaded (thousands)	Per cent loaded	Gross excluding locomotives and tenders	Net revenue and non-revenue	Serviceable		Per cent un-serviceable		
									Not stored	Stored			
New England Region:													
Boston & Albany	1941	362	165,386	178,759	16,748	4,082	66.8	240,277	92,760	67	3	17	19.5
1940	362	151,025	155,878	11,383	3,439	66.3	200,978	75,306	46	13	27	31.4	
Boston & Maine	1941	1,894	352,815	404,154	39,023	13,370	69.6	772,900	309,633	145	7	22	12.6
1940	1,892	300,062	335,496	29,358	10,683	68.6	601,279	225,871	134	..	41	23.4	
N. Y., New Hav. & Hartf.† ..	1941	1,819	442,839	555,451	42,078	17,326	70.7	942,338	379,782	210	..	48	22.8
1940	1,838	379,202	474,793	31,949	14,240	67.9	777,317	295,928	183	8	68	24.6	
Great Lakes Region:													
Delaware & Hudson	1941	849	338,007	399,123	43,256	12,757	65.6	852,175	412,377	133	28	79	32.9
1940	846	248,080	291,245	33,080	9,030	64.4	571,477	270,877	136	46	70	27.8	
Del., Lack. & Western	1941	983	399,566	456,028	61,144	16,432	73.1	962,822	418,813	142	16	44	21.8
1940	983	379,541	427,945	57,017	14,161	68.9	825,409	330,548	144	10	56	26.7	
Erie (incl. Chi. & Erie)† ..	1941	2,250	944,363	1,002,016	68,811	44,184	69.1	2,686,827	1,062,166	280	25	110	26.5
1940	2,268	812,755	867,227	57,519	36,572	66.2	2,259,714	855,462	243	8	175	41.1	
Grand Trunk Western	1941	1,023	283,603	287,932	2,170	9,035	65.0	556,060	210,626	71	..	19	21.1
1940	1,023	251,447	253,026	1,595	7,865	63.3	481,987	170,105	72	3	23	23.5	
Lehigh Valley	1941	1,251	431,809	469,155	72,357	17,617	69.1	1,111,053	502,185	127	16	41	22.3
1940	1,252	359,837	395,533	61,481	14,255	67.4	891,404	386,179	114	7	93	43.5	
New York Central	1941	10,519	3,475,129	3,731,528	225,961	127,334	63.0	8,569,911	3,788,900	1,098	86	222	15.8
1940	10,563	2,871,283	3,039,900	190,082	101,088	60.9	6,751,763	2,815,005	937	122	335	24.0	
N. Y., Chicago & St. Louis ..	1941	1,672	710,659	726,385	10,236	27,052	68.6	1,643,668	681,965	153	..	16	9.5
1940	1,672	561,925	574,268	7,958	21,479	64.9	1,311,936	505,969	129	13	24	14.5	
Pere Marquette	1941	2,068	431,908	446,199	8,736	12,530	66.9	782,842	325,135	137	..	20	12.7
1940	2,080	374,895	385,217	8,172	10,972	62.7	700,138	269,284	116	5	34	21.9	
Pittsburgh & Lake Erie	1941	232	107,026	110,214	20	4,749	62.6	406,484	234,566	45	..	14	23.7
1940	233	89,888	92,602	..	3,578	61.8	303,996	172,505	39	11	16	24.2	
Wabash*	1941	2,397	660,139	674,128	14,185	23,552	72.0	1,360,800	543,412	141	29	87	33.9
1940	2,397	600,105	614,226	13,160	20,099	66.0	1,195,489	436,064	146	24	96	36.1	
Central Eastern Region:													
Baltimore & Ohio	1941	6,245	2,198,603	2,766,832	303,808	73,312	62.5	5,147,762	2,396,064	870	50	210	18.6
1940	6,262	1,670,322	2,093,002	222,716	55,258	62.8	3,788,828	1,712,093	709	128	344	29.1	
Central of New Jersey†	1941	661	222,939	250,605	48,225	7,083	63.9	489,675	241,490	89	17	38	26.4
1940	679	184,724	206,975	40,119	6,086	62.0	421,531	202,267	75	12	58	40.0	
Chicago & Eastern Illinois ..	1941	925	193,443	194,688	3,435	5,491	69.5	342,876	155,155	62	6	20	22.7
1940	925	178,798	179,454	3,497	4,755	67.1	288,602	121,183	62	..	29	31.9	
Elgin, Joliet & Eastern	1941	390	138,311	140,242	1,667	3,909	61.0	302,388	153,945	67	..	11	14.1
1940	390	118,675	120,209	1,495	3,080	57.0	245,641	119,569	59	..	17	22.4	
Long Island	1941	375	30,996	32,392	19,767	322	52.4	24,096	8,940	37	7	4	8.3
1940	375	32,494	34,002	18,025	357	51.1	26,863	9,588	36	5	7	14.6	
Pennsylvania System	1941	9,953	4,381,056	5,164,379	639,555	171,499	64.0	11,832,351	5,563,011	1,828	60	250	11.7
1940	9,966	3,401,967	4,051,865	454,867	128,254	60.6	9,010,871	4,023,685	1,374	118	723	32.6	
Reading	1941	1,430	567,102	630,940	79,943	17,821	65.6	1,271,662	653,752	252	22	60	18.0
1940	1,441	450,373	505,786	66,305	14,046	63.2	1,003,255	494,046	220	7	133	36.9	
Pocahontas Region:													
Chesapeake & Ohio	1941	3,053	1,097,788	1,166,572	50,476	53,045	56.5	4,538,496	2,503,404	396	18	69	14.3
1940	3,058	864,484	912,322	38,454	39,079	56.3	3,210,898	1,732,155	371	62	80	15.6	
Norfolk & Western	1941	2,163	825,075	870,203	49,846	39,000	58.4	3,318,931	1,788,031	301	13	23	6.8
1940	2,169	687,492	716,291	38,799	31,801	58.1	2,611,269	1,354,394	293	26	37	10.4	
Southern Region:													
Atlantic Coast Line	1941	5,043	709,972	724,732	10,477	17,414	65.4	1,085,532	453,252	271	24	45	13.2
1940	5,074	610,400	623,430	8,697	14,215	64.0	860,721	328,878	255	40	41	12.2	
Central of Georgia†	1941	1,783	328,477	333,135	5,425	7,768	71.8	460,772	196,819	101	..	17	14.4
1940	1,831	295,666	298,822	4,541	6,706	71.1	382,757	152,838	98	..	22	18.3	
Gulf, Mobile & Ohio	1941	1,962	285,695	332,506	3,444	9,438	71.1	565,410	248,530	97	..	10	9.3
1940	1,963	251,956	275,435	3,367	8,072	70.1	464,659	199,162	85	6	14	13.3	
Illinois Central (incl. Y. & M. V.) ..	1941	6,521	1,655,454	1,664,515	29,151	52,817	64.2	3,466,099	1,519,667	591	44	92	12.7
1940	6,557	1,372,176	1,376,030	24,707	42,902	63.5	2,750,784	1,155,470	593	30	167	21.1	
Louisville & Nashville	1941	4,794	1,530,637	1,668,010	42,964	38,847	60.5	2,795,797	1,371,086	353	61	55	11.7
1940	4,862	1,182,650	1,274,644	31,905	30,238	60.4	2,113,893	1,003,716	354	48	62	13.4	
Seaboard Air Line*	1941	4,295	776,784	820,948	7,302	19,511	64.8	1,240,248	531,387	262	1	43	14.1
1940	4,301	585,172	615,019	5,419	15,377	65.4	921,527	365,147	232	14	58	19.1	
Southern	1941	6,474	1,926,916	1,967,859	28,264	44,075	66.6	2,675,045	1,133,220	561	..	106	15.9
1940	6,538	1,570,144	1,601,794	24,315	37,864	67.2	2,203,753	891,863	508	..	124	19.6	
Northwestern Region:													
Chicago & North Western† ..	1941	8,280	1,123,457	1,164,130	23,755	35,832	64.0	2,313,243	949,548	363	14	195	34.1
1940	8,324	988,003	1,034,795	21,393	31,404	61.5	2,048,060	785,100	332	22	248	41.2	
Chicago Great Western	1941	1,447	302,284	306,167	11,448	9,726	66.3	600,149	231,490	70	1	12	14.5
1940	1,447	277,744	280,604	15,020	8,693	62.6	539,243	191,417	63	3	21	24.1	
Chi., Milw., St. P. & Pac.† ..	1941	10,813	1,610,288	1,676,137	61,355	49,938	63.3	3,256,302	1,379,133	506	30	94	14.9
1940	10,850	1,359,863	1,418,057	57,048	42,833	62.7	2,752,768	1,127,167	449	49	123	19.8	
Chi., St. P., Minn. & Omaha ..	1941	1,618	250,451	265,584	12,648	6,611	67.2	402,214	166,345	116	6	12	9.0
1940	1,618	230,894	240,852	10,054	5,767	65.7	358,292	143,030	101	21	11	8.3	
Great Northern	1941	7,979	1,311,982	1,314,640	41,604	47,956	60.1	3,459,427	1,526,352	383	19	97	19.4
1940	7,973	1,124,936	1,126,778	34,879	40,621	57.4	2,987,930	1,267,775	373	23	126	24.1	
Minneapolis, St. P. & S. St. M.†	1941	4,251	496,943	508,793	7,772	12,735	66.5	829,749	371,134	133	..	8	5.7
1940	4,250	427,329	434,684	5,777	11,018	64.3	688,341	293,163	119	..	10	7.8	
Northern Pacific	1941	6,593	988,069	1,048,417	70,333	36,499	70.7	2,349,828	1,050,559	369	6	57	13.2
1940	6,422	801,071	846,678	48,600	27,904	65.0	1,753,475	732,460	349	24	74	16.6	
Central Western Region:													
Alton	1941	915	233,254	261,002	1,242	5,755	64.9	366,700	143,455	69	2	6	7.8
1940	914	216,206	243,372	1,119	5,114	62.8	329,838	125,065	61	9	13	15	

for the Month of October, 1941, Compared with October, 1940

Region, road, and year	Number of freight cars on line			Per cent un-service-able	Gross ton-miles per train-hour, excluding locomotives and tenders	Gross ton-miles per train-mile, excluding locomotives and tenders	Net ton-miles per train-mile	Net ton-miles per loaded car-mile	Net ton-miles per car-day	Car-miles per car-day	Net ton-miles per mile of road per day	Pounds of coal per 1,000 gross ton-miles, including locomotives and tenders		
	Home	Foreign	Total									Loco-motive miles per locomotive-day	Loco-motive miles per locomotive-day	
New England Region:														
Boston & Albany	1941	638	5,108	5,746	0.8	24,669	1,471	568	22.7	537	35.4	8,266	142	78.7
1940	784	5,181	5,965	1.6	22,381	1,344	504	21.9	425	29.3	6,711	145	67.4	
Boston & Maine	1941	3,228	10,814	14,042	2.7	30,832	2,198	880	23.2	697	43.3	5,274	91	88.2
1940	4,560	8,659	13,219	3.3	28,054	2,011	755	21.1	566	39.0	3,851	95	73.4	
N. Y., New Hav. & Hartf.† ..	1941	4,132	18,132	22,264	2.4	30,359	2,158	870	21.9	554	35.7	6,735	98	82.3
1940	6,444	14,764	21,208	3.9	28,686	2,080	792	20.8	462	32.8	5,194	106	70.2	
Great Lakes Region:														
Delaware & Hudson	1941	6,054	5,895	11,949	3.4	39,207	2,539	1,229	32.3	1,119	52.7	15,668	101	63.4
1940	7,862	4,145	12,007	4.2	35,515	2,316	1,098	30.0	727	37.7	10,329	112	44.4	
Del., Lack. & Western	1941	6,718	10,364	17,082	3.4	41,973	2,435	1,059	25.5	794	42.7	13,744	120	86.3
1940	9,420	6,681	16,101	4.8	38,571	2,199	881	23.3	645	40.1	10,847	123	79.3	
Erie (incl. Chi. & Erie)†	1941	10,070	24,666	34,736	2.2	49,883	2,867	1,134	24.0	1,004	60.5	15,228	89	91.1
1940	12,747	18,556	31,303	2.4	48,941	2,803	1,061	23.4	905	58.5	12,167	92	77.3	
Grand Trunk Western	1941	3,195	8,793	11,988	3.4	36,344	1,974	748	23.3	582	38.4	6,642	83	115.2
1940	3,866	8,251	12,117	6.6	36,762	1,921	678	21.6	458	33.5	5,364	86	92.0	
Lehigh Valley	1941	5,589	14,778	20,367	1.0	48,995	2,624	1,186	28.5	809	41.1	12,949	102	100.3
1940	8,503	10,754	19,257	1.1	47,350	2,519	1,091	27.1	639	35.0	9,950	105	73.5	
New York Central	1941	62,097	82,884	144,981	6.2	40,822	2,490	1,101	29.8	849	45.3	11,619	96	102.3
1940	78,118	62,457	140,575	10.8	39,048	2,370	988	27.8	646	38.1	8,597	96	85.0	
N. Y., Chicago & St. Louis ..	1941	4,203	12,392	16,595	1.9	42,095	2,316	961	25.2	1,328	76.8	13,157	85	151.5
1940	5,719	9,843	15,562	3.1	43,234	2,339	902	23.6	1,057	69.1	9,762	83	121.9	
Pere Marquette	1941	5,384	9,001	14,385	2.6	31,097	1,825	758	25.9	733	42.2	5,072	91	103.0
1940	6,942	8,429	15,371	3.2	30,723	1,874	721	24.5	568	36.9	4,176	89	90.4	
Pittsburgh & Lake Erie	1941	5,113	8,885	13,998	10.2	48,652	3,803	2,195	49.4	535	17.3	32,615	75	64.2
1940	10,696	6,099	16,795	17.9	43,728	3,388	1,922	48.2	325	10.9	23,883	85	50.2	
Wabash*	1941	8,156	11,292	19,448	1.4	41,388	2,079	830	23.1	873	52.6	7,313	104	90.2
1940	10,693	10,157	20,850	4.9	40,430	2,006	732	21.7	674	47.1	5,868	107	80.4	
Central Eastern Region:														
Baltimore & Ohio	1941	44,790	44,745	89,535	2.5	31,227	2,382	1,109	32.7	872	42.7	12,377	135	92.2
1940	50,594	30,665	81,259	6.1	30,717	2,302	1,040	31.0	676	34.8	8,820	136	67.3	
Central of New Jersey†	1941	5,076	18,711	23,787	2.4	29,572	2,275	1,122	34.1	341	15.6	11,785	129	86.9
1940	6,590	13,083	19,673	9.8	28,856	2,419	1,161	33.2	337	16.3	9,609	121	73.4	
Chicago & Eastern Illinois ..	1941	2,371	3,473	5,844	4.4	31,013	1,785	808	28.3	812	41.4	5,411	118	76.8
1940	2,895	3,262	6,157	8.7	29,978	1,630	685	25.5	634	37.1	4,226	121	68.5	
Elgin, Joliet & Eastern	1941	8,904	8,283	17,187	2.4	17,577	2,234	1,138	39.4	289	12.0	12,733	113	88.4
1940	9,308	6,792	16,100	3.1	17,975	2,122	1,033	38.8	244	11.0	9,890	111	74.6	
Long Island	1941	57	3,833	3,890	0.4	5,610	793	294	27.8	74	5.1	769	312	49.8
1940	65	3,944	4,009	0.7	6,617	842	301	26.9	77	5.6	825	286	51.9	
Pennsylvania System	1941	145,051	100,346	245,397	6.8	37,934	2,769	1,302	32.4	741	35.7	18,030	104	95.9
1940	175,347	66,178	241,525	14.3	38,479	2,709	1,210	31.4	532	28.0	13,024	104	73.3	
Reading	1941	15,041	21,295	36,336	7.0	28,100	2,250	1,157	36.7	585	24.3	14,747	128	81.5
1940	21,810	14,580	36,390	14.6	27,149	2,233	1,099	35.2	440	19.8	11,060	130	59.5	
Pocahontas Region:														
Chesapeake & Ohio	1941	40,059	16,083	56,142	1.1	57,977	4,173	2,302	47.2	1,461	54.8	26,451	67	89.1
1940	45,217	12,546	57,763	1.4	54,099	3,749	2,022	44.3	898	59.6	18,272	72	66.9	
Norfolk & Western	1941	30,940	7,243	38,183	1.6	62,928	4,086	2,201	45.8	1,514	56.5	26,666	81	95.8
1940	38,705	6,952	45,657	1.9	58,064	3,845	1,995	42.6	1,033	41.7	20,143	86	75.6	
Southern Region:														
Atlantic Coast Line	1941	10,567	10,635	21,202	5.5	25,564	1,533	640	26.0	715	41.9	2,899	106	75.7
1940	12,772	8,893	21,665	14.8	24,376	1,415	541	23.1	503	34.0	2,091	106	66.3	
Central of Georgia†	1941	2,991	5,953	8,944	0.6	26,960	1,414	604	25.3	691	38.0	3,561	117	100.5
1940	3,629	3,913	7,542	1.9	25,405	1,302	520	22.8	656	40.5	2,693	117	88.5	
Gulf, Mobile & Ohio	1941	2,898	5,509	8,407	1.8	35,325	1,988	874	26.3	1,001	53.4	4,086	105	105.8
1940	3,139	3,984	7,123	3.6	33,402	1,848	792	24.7	927	53.6	3,273	107	91.6	
Illinois Central (incl. Y. & M. V.) ..	1941	25,799	24,906	50,705	1.1	33,545	2,129	933	28.8	967	52.3	7,517	119	81.2
1940	28,328	20,396	48,724	2.1	31,750	2,039	857	26.9	776	45.3	5,684	121	62.1	
Louisville & Nashville	1941	31,788	13,698	45,486	2.0	28,172	1,831	898	35.3	977	45.8	9,226	114	123.8
1940	34,633	10,306	44,939	6.4	28,641	1,790	850	33.2	759	37.9	6,659	117	96.1	
Seaboard Air Line*	1941	9,397	12,117	21,514	2.4	27,233	1,631	699	27.2	832	47.2	3,991	119	97.8
1940	10,981	7,929	18,910	3.3	26,839	1,597	633	23.7	650	41.9	2,739	119	73.8	
Southern	1941	18,899	25,686	44,585	4.3	23,416	1,405	595	25.7	844	49.3	5,646	137	102.6
1940	21,640	22,504	44,144	9.6	24,034	1,415	573	23.6	666	42.1	4,400	134	86.1	
Northwestern Region:														
Chicago & North Western† ..	1941	28,147	26,795	54,942	6.0	30,921	2,123	872	26.5	553	32.6	3,699	118	72.6
1940	30,081	25,084	55,165	7.0	31,348	2,131	817	25.0	450	29.2	3,043	108	61.9	
Chicago Great Western	1941	1,499	4,518	6,017	1.0	36,351	1,989	767	23.8	1,204	76.3	5,160	111	130.7
1940	1,848	4,446	6,294	1.0	35,043	1,945	690	22.0	933	67.7	4,267	114	116.2	
Chi., Milw., St. P. & Pac.† ..	1941	33,510	24,238	57,748	1.2	32,636	2,032	860	27.6	769	44.0	4,114	113	98.2
1940	39,117	20,509	59,626	3.0	32,792	2,035	833	26.3	604	36.6	3,351	111	83.8	
Chi., St. P., Minn. & Omaha ..	1941	2,035	6,976	9,011	3.5	21,835	1,630	674	25.7	577	33.4	3,316	109	70.4
1940	2,371	6,187	8,558	5.1	20,856	1,571	627	24.8	527	32.3	2,852	105	65.3	
Great Northern	1941	27,345	18,691	46,036	2.2	40,142	2,656	1,172	31.8	1,030	53.8	6,171	95	95.2
1940	31,634	13,114	44,748	3.8	40,872	2,673	1,134	31.2	871	48.6	5,129	94	77.9	
Minneap., St. P. & S. St. M.† ..	1941	10,079	5,524	15,603	2.5	28,619	1,674	749	29.1	755	38.9	2,816	92	120.9
1940	11,174	4,884	16,058	3.9	26,660	1,615	688	26.6	570	33.3	2,225	92	110.2	
Northern Pacific	1941	23,769	9,909	33,678	4.9	37,114	2,396	1,071	28.8	967	47.5	5,140	119	91.5
1940	26,566	7,169	33,735	5.3	35,239	2,201	920	26.2	681	39.9	3,679	125	71.5	
Central Western Region:														
Alton	1941	913	5,895	6,808	2.9	38,008	1,578	6						

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Superhighways, Room 1940, 20
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nois, until 2 o'clock P. M.,
Central Standard Time on
Thursday, January 29th, 1942,
at which place and time all
such proposals will be opened
publicly and read aloud by a
representative of the Commis-
sioner of Subways and Super-
highways.

The work for which such pro-
posals are invited consists of
installing standard gauge tracks
on tangents and curves, special
track work, contact rails on
tangents and curves, restraining
rails, guard rails, insulated
joints, negative potheads, lub-
ricators and track walkways;
the furnishing and installing of
concrete, stone ballast, contact
rail anchors, bumping post,
steel ladders, cast iron pipe,
positive potheads, restraining
rail shims, rubber inserts and
electric conduit; the fabricating
of 144-pound rail inclines;
welding and cutting of rails;
and the performing of other
work appurtenant and collat-
eral to all of the foregoing as
specified in the Contract Docu-
ments and shown on the plans.

All bids must be made upon
blank forms of proposal as
furnished by the Commissioner
of Subways and Superhighways
and included in the Contract
Documents, and shall be made
in accordance with the pro-
visions contained in said docu-
ments.

The Contract Documents, in-
cluding Standard Specifications
for Subway Construction, Con-
tract Requirements and Contract
Plans, are on file and available
to bidders at the office of the
Commissioner of Subways and
Superhighways at Room 1940,
20 N. Wacker Drive, Chicago,
Illinois. Copies of the Contract
Documents may be obtained by
depositing Twenty-five Dollars
(\$25.00) with the Commissioner
of Subways and Superhighways,
for each set of documents. The
amount of the deposit for one
set of documents will be re-
funded to each actual bidder
who returns the said documents
in good condition within ten
(10) calendar days after the
openings of bids. Fifteen Dol-
lars (\$15.00) will be refunded
for each of all other sets of
documents so returned.

Each proposal must be ac-
companied by cash or a certified
check drawn on some responsi-
ble bank doing business in the
city of Chicago, in the amount
of Twenty-five Thousand Dol-
lars (\$25,000.00) payable to the
order of the City of Chicago.
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out being accompanied by such
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The City of Chicago reserves
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No bid may be withdrawn,
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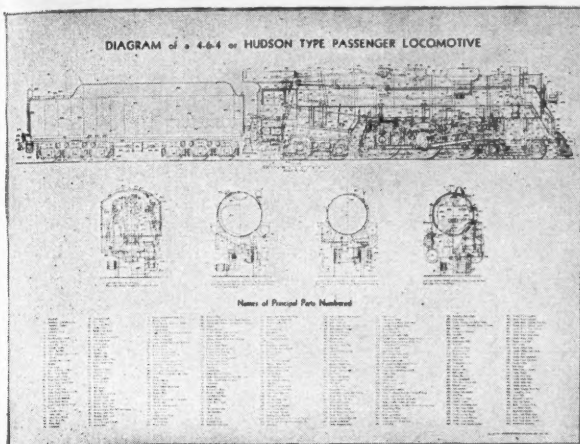


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